

Housing in the Virgin Islands

W. POPE BARNEY, ARCHITECT; ROY W. BANWELL, ASSOCIATE

By Harold Donaldson Eberlein

❖❖❖❖❖ IN the Virgin Islands a government scheme of subsistence housing has just been launched, to be followed later by a programme of slum clearance. For both housing developments, the plans are those of W. Pope Barney, made after a careful study of conditions now existing and an estimate of the desiderata eventually to be realized.

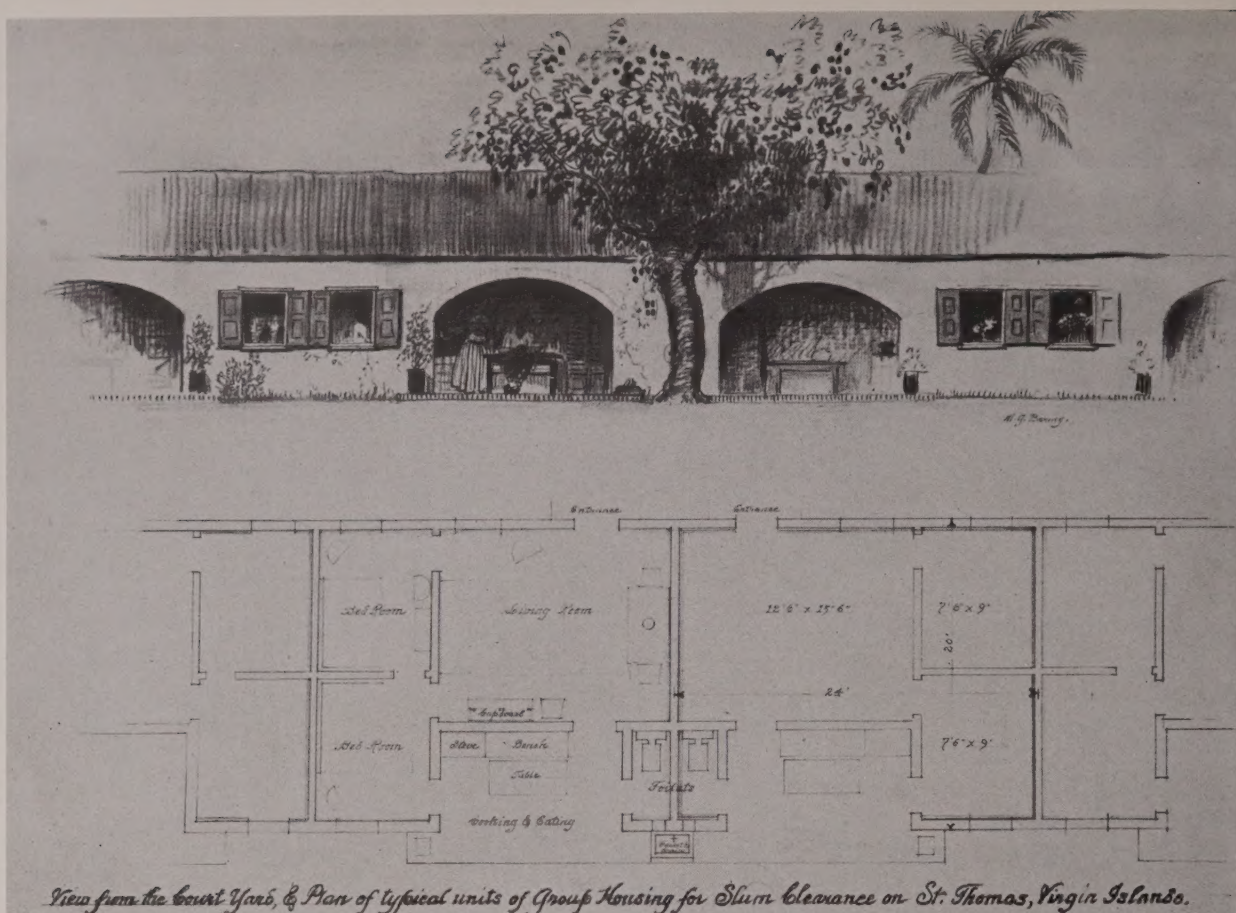
The scheme of betterment aimed at is characterized by plain common sense; there is no place for Utopian aspirations foredoomed to failure, prompted perhaps by benevolent motives but incapable of standing the test of actuality. It is based, first, on a thoroughly realistic perception of the present state of housing, in all its aspects, and the habits of the occupants; second, on a conservative and sane estimate, the fulfillment of which it is reasonable to expect under the stimulus of improved surroundings and opportunities, planned with reference to the social and economic facts of the situation. There is no attempt to "provide pocket handkerchiefs for the Zulus," so to speak, and to force conditions and accessories of living upon those unable to use or profit by them; the provisions are gauged by the extremely simple habits and requirements of an unskilled laboring class in a kindly climate, and by the outlay economically justifiable in view of the prospects to be considered. Baldly stated, the problem was how and where to provide physically and socially adequate shelter for the lowest-income group at rentals—or instalment-purchase sums—they can afford to pay. So far as the subsistence housing is concerned, the project originated in the governor's wise desire to encourage among the people a wholesome spirit of self-help and self-support, with a view to reducing or eliminating the present annual deficit of the Islands.

The subsistence-housing programme is now being carried out in the islands of St. Thomas,

St. John, and St. Croix; the slum clearance programme will be put into effect first in the town of St. Thomas, where the dwellings of the lowest-income group are congested and where there is urgent need of remedial action.

Whatever objections may be urged against subsistence housing or subsistence homesteading in general theory or practice, there is unquestionably sufficient justification for at least some degree of it in the Virgin Islands. It does offer a solution—at any rate, a partial solution—for the problem of dealing with one hitherto improvident, irresponsible, and none too industrious element of the colored population. Without permanent possessions and without incentive, many of them have been accustomed to exert themselves only to the extent necessary for a mere "hand-to-mouth" existence in respect of food and shelter. The plan now in operation puts them in houses suited to their needs and furnishes a plot of ground whereon to grow all their own food, and likewise raise a cash crop (ordinarily sugar-cane) sufficient to enable them to pay off the purchase price in about eleven years. The plots range in size from one to ten acres; the average is about five acres.

As a matter of fact, experiments have already been made in this direction for the past two years, with encouraging results. The reports show that more than 75 per cent of the holders so placed have paid this year's instalments before they were due and have creditable cash balances still on hand for clothing and incidentals. It is the policy first to find the man or family desirous of taking one of these subsistence holdings, and then to give the holders every inducement to become more intelligently productive than in the past. Thanks to local conditions, the operation of the system in the Virgin Islands has none of the weakness usually betrayed by subsistence-homesteading projects



elsewhere, in which families are transplanted from an urban to a rural environment of which they have had no experience and the economics of which they utterly fail to understand, and hence court disaster.

The subsistence-housing units, as indicated by the plans, can be built with two, three, or four rooms as desired. The two-room houses can be enlarged to either three-room or four-room dwellings whenever there is occasion, without causing inconvenience or demolition. The budget allowance for the two-room house is \$550; for the three-room and four-room house, \$800 and \$1000 respectively. The cost is pared to the minimum compatible with sound structure, but the houses are adequate for the requirements and comfort of the occupants, and ultimate ownership is not beyond the reach of the lowest-income class. Costlier houses would be beyond their reach, would serve their needs no better and would only involve a discouraging burden of debt. In every case the budget allowance includes a furnishing equipment of bench, table, cook's table and cupboard; it also includes the architectural and engineering commission. The skeleton specifications are as follows:

MAIN ROOF, constructed of 2" x 6" rafters, surfaced four sides, 24" on centre, sheathed with common pine, surfaced four sides, over which will be corrugated galvanized iron, 24 gauge, in sheets attached by screws.

PORCH ROOF, corrugated iron lashed to 1½" iron pipe framing, lashing by means of woven galvanized iron wire.

EXTERIOR WALLS, concrete block 8" x 8" x 16", laid up in mortar, 1 part Portland cement, 1 part lime and 6 parts sand.

INTERIOR PARTITIONS, 2" x 4" studding, 24" on centre, surfaced four sides, sheathed on one side with white pine, t-&-g, surfaced both sides.

FLOOR, No. 1 common pine flooring over 2" x 8" joists, 24" on centre.

WINDOW FRAMES, built at the job from 1½" x 6" material trimmed with 4" x 7/8" white pine or cypress.

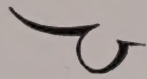
WINDOW and DOOR SHUTTERS, built at the job, 1½" batten, white pine or cypress, with three battens.

DOOR FRAMES, built at the job, 1½" x 4", trim 7/8" x 3", white pine or cypress.

INTERIOR DOORS, 7/8" batten type, same material as partitions, 3 battens.

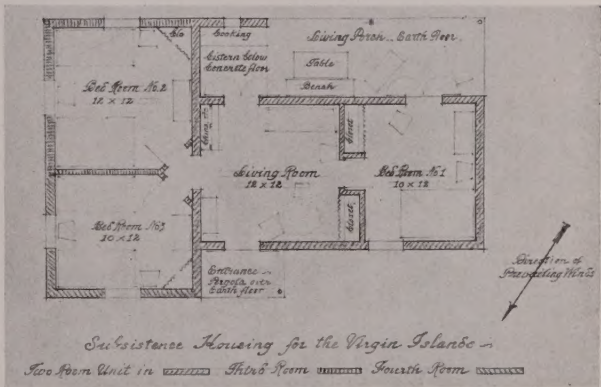
KITCHEN CABINET, stock wood drawers and cupboard below, cupboard above.

HARDWARE, allowance of \$20 for hardware, nails, and flashing.
PAINTING, no paint on interior woodwork. Concrete block walls inside, and roof sheathing and rafters, to be whitewashed before interior trim, partitions, or floor are started. Exterior woodwork and metal (but not the corrugated galvanized iron roofing) to have three coats of lead and oil paint. Exterior concrete block to have one coat of plastic oil paint.
CISTERN, walls, top, and bottom, to be 300-lb. reinforced concrete, water-proofed.
GUTTERS, 4" galvanized iron stock half-round, hung in galvanized iron hangers.

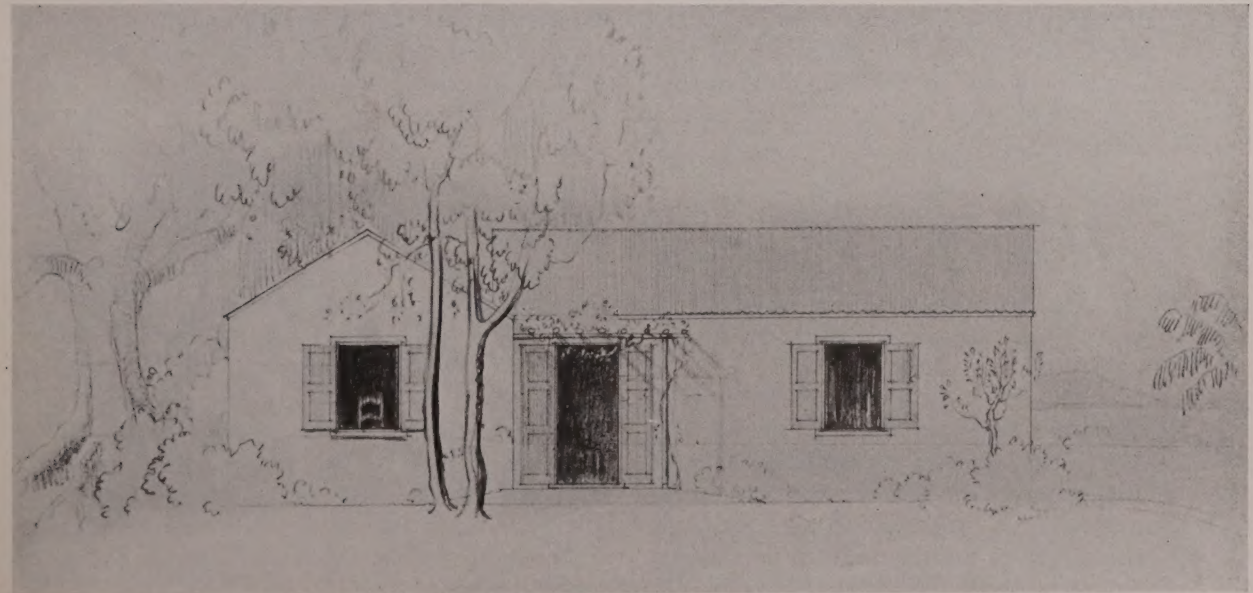


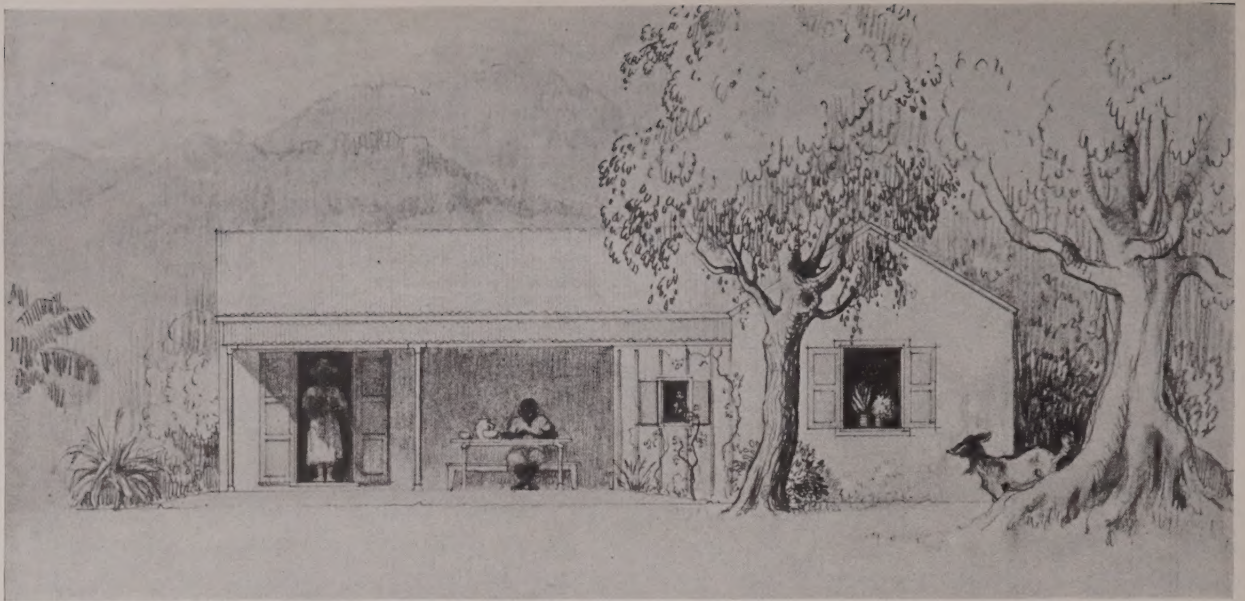
There is no provision for glazing; the climate renders it unnecessary. The shutters furnish shade, when needed, and protection in case of tempests. The natives prefer to cook in the open air, hence the cooking arrangements at the end of the living-porch, which latter has a dirt floor. The rooms have wooden floors, as many of the natives habitually sleep thereon; the flooring is treated with creosote to discourage termites. Interior partitions extend only to tops of doors, to insure free circulation of air. Closets in the rooms have no doors but only cotton hangings, to insure ventilation. The corrugated roofing facilitates the catching and conveyance of rain water to the cisterns, which afford the usual water supply. Corrugated iron is the universal roofing material of the Islands, even for the best houses. The budget includes the building of a tool shed and outhouse, at proper distance from the dwelling. These houses are not necessarily built in related groups; they may

quite as well be built singly whenever and wherever required.
For slum clearance in the town of St. Thomas, the survey of existing conditions shows that the lowest-income group, "predominantly harbor and commercially minded," swarm in dwellings manifestly unfit for human occupancy. One thousand three hundred of these are "one-room units, approximately 8' x 10', built of inflammable materials, in most cases in continuous rows, two rooms deep." Not a few of these shacks are of the flimsiest tinder-box construction, covered with pieces of tin salvaged from discarded vegetable cans. "In 1137 of these units now live 2521 persons. Five hundred and twenty-eight units are in bad, or very bad, repair and the overcrowding of the extremely meager quarters is appalling. Some of the units house as many as 11 persons. Five hundred of



The plan provides for three stages of building these subsistence houses: a two-room unit; a third room added; and a fourth room added. Front elevation of the completed house is shown below





Living-porch side of the four-room unit. Walls are of concrete block, painted; roofs of corrugated iron; porch roof lashed to pipe supports. There are no sash, the shutters providing shade and protection from high winds. Cost per unit, \$1000

them house more than two people to the room. Cooking, washing, living, and sleeping are all done in the one room, and the partitions between family units in many cases do not go to the roof or ceiling, so that family privacy, even within the area of 8' x 10', cannot be secured. The water supply, which must be caught on the roof and preserved in cisterns, is inadequately provided for and protected. Sanitary conveniences available average one community outhouse to ten families. Surface drainage is the only disposal for refuse water from cooking and washing." Such conditions constitute slums of the worst sort, by whatever standard they be judged, and entail a heavy social cost.

The people inhabiting these shanties and tincan huts, many of whom find their chief employment in the manual coaling of ships in the harbor, cannot afford to pay more than \$1.50 a room per month. "This obviously makes it impossible for them to build and own houses, and unprofitable for private capital to supply, at this low rental, anything but dilapidated shacks and sub-standard sanitary arrangements.

The worst slum areas, it happens, are in the most central and convenient spot for the employment of those who dwell there; these contiguous districts, lying as they do along the waterfront, "offer unique possibilities in the way of inexpensive sewage connection, open recreation spaces for children and adults, space for subsistence plots, and their frontages along the Main Street and the harbor yield an element

conducive to maintaining the morale of community effort toward social betterment," once some degree of radical reformation can be effected. The task is, therefore, one of reconstruction and not a matter of fresh development on a new site.

Removal of some of the population from these slum districts against their will and establishing them on homesteads is not feasible, because there is a distinct sentiment among the natives that the agricultural worker belongs to a lower caste than the town dweller. The most promising method of remedy, therefore, indicates the demolition of the existing haphazard shanty growth and the building, in this same area, of continuous rows or blocks of dwellings, with small subsistence plots at the rear. There is fortunately enough available area in these now random-built districts to admit of such rehabilitation without transplanting the population from the zone in which they find their livelihood and where they wish to be.

The cost of these three-room houses in rows, together with the land value, is \$1000 per unit. At a rental of \$4.50 per month (\$1.50 a month per room) these dwellings will yield a return of 5.4 per cent on the sum invested, against which must be charged the necessary upkeep. They are intended for rental only. They are built of concrete blocks, with corrugated iron roofing, and the specifications are in every way similar to those of the detached subsistence houses already described.

A Critique of Knickerbocker Village

By Albert Mayer

Knickerbocker Village is a large-scale housing project carried out by the Fred F. French organization in lower Manhattan. Started as a private commercial venture in 1927, the depression brought

about a limited-dividend corporation under the supervision of the State Housing Board, with tax exemption, a maximum rental rate, and a loan from the Reconstruction Finance Corporation



Photographs by Richard Averill Smith

WHAT is the significance and value of Knickerbocker Village in New York City? It deserves especially careful consideration because it is the first large-scale housing project financed by the Federal Government since the war-time work, and because every project erected in the present early stages of the housing movement is bound to exercise great influence on its course, to advance it or to retard it. Before any detailed discussion, a list of characteristics is given, so that the reader will have a concrete picture of the project in mind.

Location and Area: New York City, on Manhattan Island. An area of 219,700 sq. ft. (about five acres), bounded by Cherry, Catherine, Monroe, and Market Streets, in the heart of the Lower East Side slum.

Size of Project: Number of apartments, 1593; Cubage, 13,275,000 cu. ft. at 48 cents per cu. ft.; Total estimated cost, \$9,500,000;* Land cost, \$3,116,961—\$14.20 per sq. ft.; Construction cost, \$6,383,039; Coverage, 46 per cent.

Total Number of Rooms: 5233 (ordinary room count†), 6029½ (counting dining-alcoves or baths as half rooms; the figures on the next four items are paralleled in the same order).

Average Number of Rooms per Apartment: 3.28, 3.78.

* Of this \$8,075,000 is a loan by the R. F. C.

† "Ordinary room count" means that living-rooms, bedrooms, and kitchens are called rooms, as is generally the custom. The New York State Housing Board permits a count of half room for the bathroom or dining-alcove in an apartment. All rentals, number of rooms, etc., in Knickerbocker Village, in its publicity, are based on including these extra half rooms. However, as this seems artificial, a parallel series of figures based on customary count has been calculated and included.

Rent per Room per Month (Including Heat and Hot Water): \$14.40, \$12.50.

Construction Cost per Room: \$1220, \$1059.

Land Cost per Room: \$596, \$517.

Average Net Room Sizes: Living-room, 210 sq. ft.; Bedroom 133 sq. ft.; Kitchen, 74 sq. ft.; Average of all, 138 sq. ft.



In appraising Knickerbocker Village, its qualities should be weighed from the social-economic viewpoint and from the architectural viewpoint—that of site planning, floor plan, space-quality, façade. This is a convenient distinction, though actually the social-economic

and the architectural are not separable, for it will appear in this project especially that the two aspects are interacting at almost every point, and that the broader architectural aspects are largely determined by the social-economic.

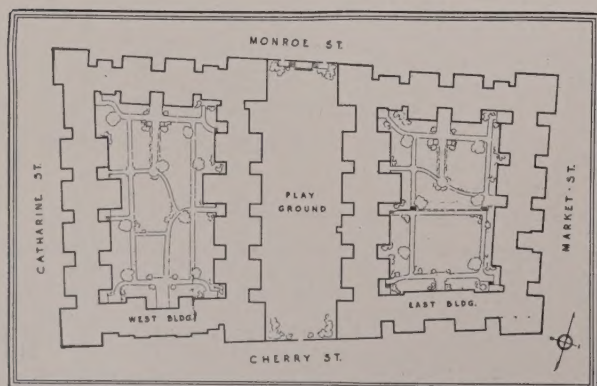
The basic theory behind Knickerbocker Village is sound. Here is an ancient, now derelict, slum area where immigrants found a convenient stopping-place near their point of arrival from Europe, and where low-wage workers found employment either at home or in nearby factories. These conditions have changed radically. There is no longer any immigration. The garment and clothing factories have moved away. The neighborhood is no longer convenient to these industries, and indeed transit in the locality is not particularly good. However, it is convenient for white-collar workers and others who work in Wall Street and other business centres in Manhattan and Brooklyn. This can be seen from the location map shown herewith. The district has an attractive water-front, and its location is a sort of backwater through which none of the main traffic arteries flows, making it particularly suitable for residential development. This kind of development is paralleled by that of Greenwich Village in Manhattan, where the Lower West Side slum was eaten into by a series of speculative operations which intelligently seized on the fact that the neighborhood's character had changed, and which provided walk-to-work living quarters for those of moderate means. Many have mistakenly attacked Knickerbocker Village because they sentimentally expected lowest-rental housing to continue there, after the neighborhood was no longer suitable for it except in incidental amounts.

Another sound basic factor in Knickerbocker Village is that it provides housing for those of medium income at a rental they can afford. The housing problem in our large cities is not only a problem of low-rental housing. The white-collar and professional groups in our large cities simply cannot find decent quarters conveniently located—either they must choose hall bedrooms and boarding-houses or they must pay an exorbitant portion of their income for good accommodations. Knickerbocker Village's location near to places of work is another excellent point. It both eases people's daily lives to keep them out of the transit scramble, and it tends to decrease the strain on the city's transit facilities.

But having said this in its praise, you have said nearly all. The two basic ideas are sound, but the specific result—Knickerbocker Village—is disappointing and fundamentally depressing.



The location is on the lower East Side of Manhattan between the two bridges



Location and plot plan

When I noticed its individual defects, I searched my mind for some general underlying reason, because the men responsible for it are capable men. The underlying reason, in my opinion, is this: They faced an impossible problem, a set of inherently contradictory premises that were rigidly fixed. With high land value and fixed costs of financing, they had to meet a fixed rental set by the Housing Board in order to gain certain advantages, including partial tax exemption. In order to meet this rigid complex of conditions, they took it out on the planning. They had to go twelve stories in height, and they had to torture out a plan full of difficulties. I will show in a moment what this meant to the project itself. But I first want to trace its effect

on the city generally, due to the high population density involved. I am not against twelve-story buildings, if some one chooses to construct them, provided they are spaced properly so as not to incur excessive population densities. But Knickerbocker Village places 5233 people (using the customary figure of one person per room) on 5 acres, or a density of 1047 per acre—or a residential density over four times that of Manhattan Island now! Of course, this is absurd. The answer to any such density is that Manhattan has for many years been losing population, even at its much lower density—you can build more densely, but people move away. It means that a few Knickerbocker Villages can be built, and that the rest of the land can simply never be used. Its value will eventually be zero. In short, land generally will subsidize the few landowners who manage to build first. The alternative would be such a colossal overbuilding as would make any previous excess in this country look like a famine. This is the vicious kind of absurdity we get to when we build up a single piece of property without regard to the larger picture.

Now let us look at the effect of this rigid complex of land cost, financial cost, and fixed rental on the development itself. In order to reach the coverage of 46 per cent, the double perimeter plan or continuous series of dumbbells has to be used, with its numerous small courts on both sides. These dumbbells have a central corridor, in order to have a sufficiently large number of rooms off each pair of elevators



The group as it appears from the corner of Market and Cherry Streets

so as not to make the elevator cost per room excessive. Some of the results are:

1. Bedrooms placed at the back of the small courts with the window at one side.

2. The desirable corner exposure is occupied by the kitchen. As the kitchen is narrow and not as deep as the living-room, part of the bedroom is tucked behind it. In one case, where this is not so, the bedrooms of two apartments face each other across a narrow court, with consequent loss of privacy. In several other cases, the living-room of one apartment faces the bedroom of another across a narrow court.

3. Typically, there are twelve apartments off one corridor, with one apartment at each end of the corridor having through ventilation. Thus about one-sixth of the apartments have through ventilation. Most of the other apartments have only one exposure. They cannot have through exposure because of the corridor running down the centre. Most of these could have had a sort of secondary exposure at 90 degrees by placing windows in the kitchen wall. This was not done, probably, because the windows of two apartments would have faced each other across a narrow court with consequent loss of privacy. I myself think they did choose the lesser of two evils.

4. The width of central corridors has been pinched. They average about 120 ft. long and are only 4 ft. wide. As, in addition, they are without windows and are painted a drab buff, the effect is dreary. The length of the corridor is necessitated by the plan, but its narrowness

and dull appearance are unnecessary and indicate lack of imagination. In fact, the treatment of this corridor is symbolic. The extra cost of adding a couple of feet to the width of the corridor would have been negligible. But when you acquire the habit of pinching and cramming, you instinctively pinch and cram even when there is little or nothing to be gained.

I want to quote at this point from a speech of Mr. Fred F. French, whose organization promoted, designed, and erected the project.*

"Does the high cost of land in lower Manhattan render slum clearance impracticable at this time? No, it does not. The cost of the entire 219,000 square feet contained in Knickerbocker Village averages \$14. If this property had been obtained for \$1 per square foot, that would mean \$219,000 for the total cost of the land. Interest at 5 per cent on this amount, together with amortization at 2 per cent, would come to approximately \$15,000 annually; \$2.50 per room per year; 21 cents per room per month. Inasmuch as the land cost \$14 per square foot instead of \$1, the monthly cost of the land per room to the tenant comes to \$2.94."

He misses the point here as it is missed in the development of the project. If in selecting land he felt it was worth \$14 per sq. ft., he probably knows.† But then he is so impressed by the high land cost and other fixed costs that he cramps his plan and develops absurdly high densities to get his land cost per room *down* to \$2.94 in rental. Let him, if he will, pay these prices for his land—as he makes no claim at reaching very low rentals in any case—let him follow this through courageously with open, sensible planning, let his monthly rental be somewhat higher as a result. He will then be developing a consistent project, one that will reach a somewhat higher stratum of the same group he is reaching now, but one that is planned for the future, not one that is just a trifle better than the past speculative operations. He would not be jeopardizing his or the government's investment, but enhancing the chances of permanent success. For Knickerbocker Village could have been planned a good deal more liberally and could still have been sufficiently cheap to have attracted the same groups; for, as I have

said, there is practically no accommodation for these groups in New York at prices they can properly pay. Of course, the promoters of Knickerbocker Village did not set the complex of rigid conditions which they tried to meet. It may be that the R. F. C. conditioned its loan on reaching a certain arbitrary rental. However, it is the finished project as it stands that is being judged, not the degree of responsibility of various people for its various characteristics.

What of site-planning, façade, general livability? In general, these too have been impaled on the inexorable complex of fixed land cost, fixed finance and building cost, and rental fixed without regard to them. In the first place, the plan of each of the two units is a hollow rectangle, with only narrow entries to the larger inner courtyard or garden. This creates a menacing impression to any one passing on the street—great lengths of red brick wall extending high above the eye's normal angle of vision. From the point of view of the passer-by, separate speculative buildings would have been more interesting than these relentless barracks of brickwork. The promoters claim to have done an enlightened job, but I simply shudder to visualize the impression if surrounding owners were to build so that there would be similarly enlightened jobs on both sides of the narrow streets. The projects would gravely damage or ruin each other. Either that, or Knickerbocker Village expects property under other ownerships to act permanently as its lightshafts because it was built first. Let property owners generally absorb the implications of this alternative before they glibly applaud and back such operations.

From the point of view of the inner court, it would have been preferable too to have had a generous opening left at one end of the rectangle at least. Though these courts each measure two-thirds of an acre, the scale is wrong. The uninterrupted high surrounding walls produce an impression of confinement. But again, the planning is too tight to permit the loss of possible rooms. If it is argued that openings were not made in order to retain privacy as against the surrounding slums, there are two answers to refute this: First, that the whole development is predicated on the ultimate eradication of the slums; and, second, that the openings could have been made to face the playground between the two units.

I cannot describe the façades as other than depressing. The length seems interminable. This is due in great measure to the plan, whose frequent narrow courts make any rhythmical

* Delivered November 21, 1933, to the Management Division of the Real Estate Board of New York, entitled "Slum Clearance and Knickerbocker Village."

† I will not here discuss the question of whether the government should lend its funds on land at such a price. My views on this are definite, but such a discussion would lead too far afield from the purpose of this article.



Detail plan of the northeast corner of the east building on a typical floor. The project was designed by John S. Van Wart, architect, with Kenneth Franzheim acting as supervising architect for the R. F. C.



Living-room of a Knickerbocker Village apartment

composition difficult if not impossible to attain. If their spacing and proportions were different, they might be effective in creating a plastic sense of masses. But as it is they are simply unpleasant, badly scaled interruptions which do not architecturally relieve the impression of relentless expanse. Nor do the windows serve to relieve this impression. They are irregular in size and spacing and heavy in scale. If double-hung wood windows had to be used, at least the centre mullion could have been considerably narrower, which would also give more light in the rooms. One would have preferred steel casements, both from the point of view of the façade and of the light within the rooms. I suggest that when these windows are repainted, they be painted in the red of the brickwork instead of light buff as now. They will be less disturbing.

No portion of the roof is made available for the tenants generally—there are some private terraces. This is too bad, because one justification for the tall building is the sense of freedom one gets in the magnificent panorama. The views from the roof at Knickerbocker Village are very fine, and I am particularly sad that they haven't been made available.

As to community facilities, the requirements in a development such as Knickerbocker Village are by no means clear. The people who will live there are largely from the white-collared and professional groups, whose main reasons for moving there are convenient access to work and lower-priced accommodations than they can get elsewhere. They are independent people

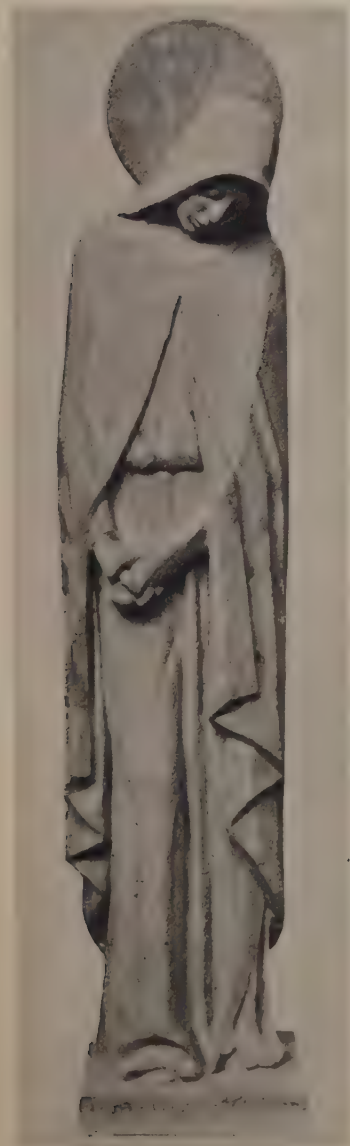
whose circle of friends extends to many sections of New York. Whether they will develop community life in the ordinary sense is highly problematical, and I should think unlikely. For this reason, I don't consider the question of the adequacy of these facilities can be profitably discussed as yet. The playground I would judge to be adequate in size, for the present at least.

On the whole, then, Knickerbocker Village does a disservice to the theory of large-scale housing. No doubt it marks an improvement over typical speculative apartment-house construction in New York City. But it has not begun to shake itself loose with any completeness from the old general theory of speculative building, from

the cramped planning, from the unimaginative, almost instinctive economies. The result is that it has done just a little better than speculative housing, but it has failed to assimilate the enormous strides in housing theory that the last five years have developed in this country. I am aware that the development is stated to be 98 per cent rented. But this doesn't mean much. Most new buildings are fairly well rented to start with. In addition, there has been a practically complete cessation of apartment building in New York for four years at least. But when building does open up again on any large scale, when the accumulated knowledge of good planning is utilized, Knickerbocker Village will not stand the test. The life of a building is many times longer than its first two or three years. Large-scale housing must not be judged by this example. Large-scale planning demands large-scale imagination. Freed from the irrelevant limitations of small, badly shaped sites, given both physical and social control of significantly large areas, it must also discard small ideas. It is capable of finer planning because of its liberation from hampering limitations, because of inherent economies as distinguished from the speculatively employed economies which are not economies in the long run. Its scale makes possible a human and architectural synthesis that gives new freedom to the spirit. Not the old freedom, which belonged to the speculator who got there first, but freedom within the framework of that larger and more important unit, the city of the future.

Sculpture in Concrete—Cast and Tooled

*Sainte Vierge, from the Calvaire
of the Église de Roye*



*Saint Jean, from the Calvaire of
the Église de Roye*



*The Christ, from the Calvaire of
the Église de Roye*

Photographs by Régis Lebrun

RAYMOND COUVEGNES,
SCULPTOR

« ARCHITECTURE »
JANUARY, 1935



*Christ and His Mother
—one of the Stations of
the Cross in the Eglise
de Roye, as are the other
examples on these two
pages*



*Christ Comforts Wo-
men of Jerusalem*



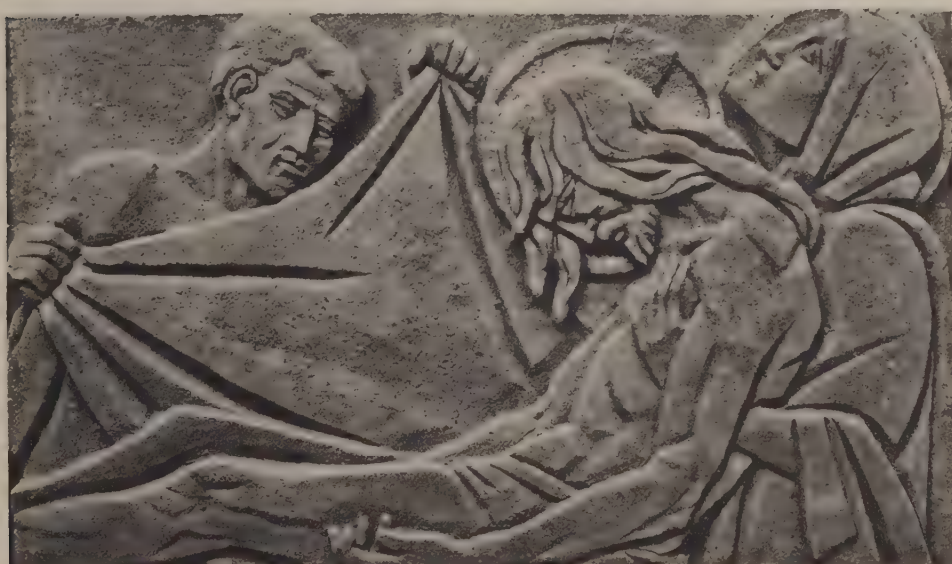
Photographs by Regis Lebrun

One of the Falls

*Simon Helps Christ to
Carry the Cross*



*Christ Is Laid in the
Sepulchre*



Photographs by Régis Lebrun

*Christ Is Anointed with
Oils*



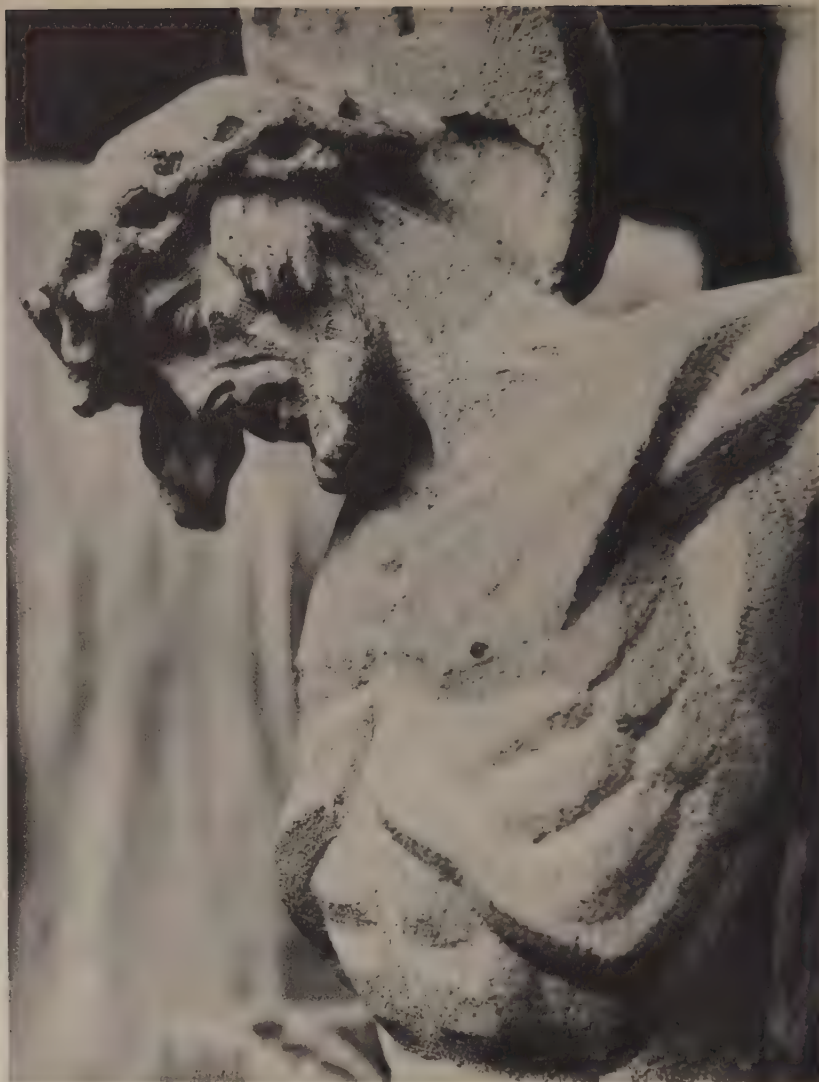
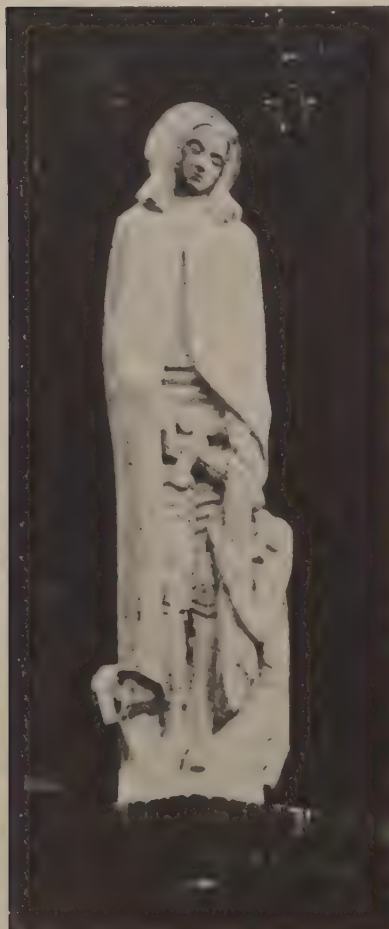
« ARCHITECTURE »
JANUARY, 1935



Calvaire, Eglise de Beuvraignes

Photographs by M. Dauphin

Saint Martin, Eglise de Beuvraignes

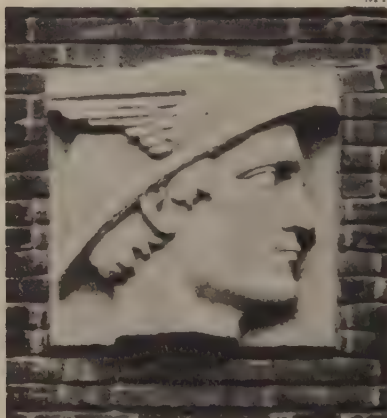


Regis Lebrun

A detail of the Christ in the Calvaire of the Eglise de Roye, showing the texture of the concrete as tooled after being cast

Two inserts in the brick wall of the Hotel de Ville of Montdidier

M. Dauphin



Obsolescence Insurance

THERE SEEMS TO BE NO GOOD REASON FOR OUR CUSTOMARY ASSUMPTION THAT A NEW BUILDING MUST NECESSARILY DETERIORATE FROM THE DAY IT IS OPENED

By *J. C. Knapp*

Vice-President, Otis Elevator Company



THERE seems to be, here in America, a theory that buildings are, in their nature, a deteriorating investment. I believe this theory to be basically false.

A building consists of *two* kinds of investment: one which *does* deteriorate and finally disappear; and the other which *does not*. In a building that is normally sound, a large proportion of the investment is of a non-deteriorating character. The deteriorating part consists, as you know, of the superficialities, the accessories, and the various services. The thing that causes our buildings to be thrown on the scrap heap is the failure to distinguish between those two classes of investment. Today, a building becomes unprofitable, and is torn down, merely because the deteriorating factors are not segregated and then given scientific, periodical attention.



There is a quite different attitude toward building investment in Europe—in fact, almost everywhere, outside of America. Such investments (and their earning power) are constantly maintained through a regular, thought-out plan, whereby the deteriorating factors are never given a chance to ruin the building.

As an illustration, the San Juan Hospital at Manila has recently come to my attention. Incidentally, this is the oldest hospital under the American flag. It was built in 1575, and is today a thoroughly modern hospital in every respect, with modern operating-rooms and modern service throughout. The point is, this hospital has progressively kept itself modernized.

I suppose that one of the reasons why most American buildings do not follow this process of step-by-step modernization is our particular practice of bookkeeping, as it relates to amortization reserves. The theory on which these reserves are set up is to write off each year a small percentage of loss on the investment. In very few cases is such an entry

reflected in actual cash in hand. It is merely bookkeeping. Now this theory contemplates that at the end of twenty-five or fifty years the building will be useless; and, therefore, the investment must be written off. Such a practice has always seemed to me basically wasteful and unsound.

A far more justifiable basis is to be found in the principles of obsolescence insurance. Briefly stated, obsolescence insurance does *not* recognize that ultimate loss in the basic structure is either necessary or inevitable—that is, provided the superficial parts, together with the building's services, are properly cared for and renewed on a systematic basis.

Obsolescence insurance virtually says to the building owner: You have already provided a bookkeeping fund to compensate you for the total loss of your building in years to come. This you call amortization reserve. Instead of a mere bookkeeping entry, you should *spend* a part of this fund for the renewal of what really deteriorates—and thereby save the building. Spend this part regularly, as conditions develop. Use it for the purpose of maintaining your property at its full earning value. With such a regular and continuous programme, the outlay each year will be found to be moderate. You can pay for this modernization programme as an integral part of the building's operation; and it will prove a scientific protection against time, wear, and tear. In fact, it will prove just as practical as your insurance against the fire hazard—and just as necessary. It will keep the value of your investment intact, and it will maintain, and even increase, the building's earning power. Do this, and you will roll up a growing good-will and a growing property value, which

now are so often denied you through your old method of letting minor things become out-moded.

Naturally, for building owners to follow this advice there must first be set up an adequate routine. This should consist of a periodical survey and examination of the building, say, once a year. Then a decision should be reached as to what must be done. This settled, the money set aside for obsolescence insurance in that year is appropriated to pay for the improvements determined upon. Once started on this path, common sense will dictate the course for future years. Visible things will usually get the first attention, because such defects quickly prejudice both tenants and visitors against the building. When these first eyesores have been cured, the functional apparatus will have attention. These are such items as water service, electric service, and things similar. By this method the building will always hold its strong place against its newer competitors. And it will also have what they have not—all the added advantages that time, reputation, and location bring.



With proper education in this country, obsolescence insurance and all that it implies will eventually be understood. For the building owner it will mean the adoption of a method whereby, say, once a year, a really scientific survey of his building is made. This survey will determine just what changes and improvements are necessary to keep his building in the front rank.

Now, to do this will undoubtedly require the services of an architect. Once this practice is established, why should there not be an arrangement made between the architect and the owner whereby the architect *continues* to have an official connection with the building after the building is completed? For a small retainer, the architect would agree to examine the building once a year and formulate for the owner the

changes and improvements to be made that year. After these have been agreed upon, the architect would handle the contracts and supervise the work, charging therefor a percentage based on the actual cost. In this way the architect would retain a vital interest in the building indefinitely. First, he would build it. Then, as the years went along, he would see it grow into a constantly more modern structure. He could incorporate new materials and practices. It would be *his* building, not for a short time, but always.



The building manager is also interested in true obsolescence insurance. Today, the great majority of buildings are handled by very able managers or superintendents. They are generally familiar with the ordinary problems of operation and maintenance. They may even suggest improvements or changes, but I think this is rarely done under a scientifically formulated plan. There is, for instance, no professional person whose business it is to see that the building is kept scientifically in a healthy economic state, attractive and modern, inside and outside,—comparable to the newer buildings in the vicinity.

In that capacity the architect (and preferably the *original* architect of the building) is certainly the best suited to advise. His rôle should be, perhaps, somewhat similar to the one played by the family physician. He not only brings the child into the world, but looks after the child's health through youth, manhood, and thereafter. The architect certainly knows more about his

own building than anybody else. Why should he not capitalize on it, to his own advantage and to the advantage of the building?

Before broaching this subject, I took the precaution of obtaining the opinions of several architects and building managers. The opinions were encouraging. One vice-president of a large real-estate firm said:

"In a few cases owners with whom we deal *do* retain architects as permanent consultants on their buildings. They are paid on a yearly basis and make periodic inspections of the building—and we find that such buildings are given better care than those which do not take advantage of such services."

From this, it would appear that if the architects become seriously interested in modernization work, and will formulate a practical method of approach, the much harassed building owner will welcome the move.

But there are other people, also, who are interested in this question. There is, for instance, the contractor. He, too, has a modernization technique to develop. Contractors today are far better equipped, technically, to execute *new* work than they are to modernize old buildings. This condition is already being remedied.

Also, the building manufacturer is changing his concept of what his basic business consists of. In the past he has had an organization based on the sale and financing of work for new buildings. This old set-up seems now to be changing rapidly. Some of the larger corporations are now putting the emphasis on modernization—and they are going ahead. I believe that if the building supply men will get behind the educational features of obsoles-

cence insurance, a foundation will be laid for a large continuing business in modernization, even after the depression is over.



Then there is that very important individual, the mortgagee. Let us see what he does at the present time: Before loaning money on real estate, he tries to be very careful. He searches the title; he makes a very painstaking appraisal; he insists that the fire insurance on the building be kept up; he watches to see that the taxes are paid; and then, he leaves out, perhaps, the most important of all protective provisions—obsolescence insurance. He makes little or no provision against the melting away of his equity through obsolescence. At present, he permits the owner a free hand to determine whether or not the value of the building shall be destroyed through needless depreciation. During the time that the building is supposed to be the security for the money lent, its value and earning power are disappearing; and he is helpless to protect his equity. When the mortgagee wakes up to this, he is going to insist that the principles of obsolescence insurance be just as carefully followed as the other protective measures which he now watches so anxiously.

I think we need a revision of our practices in operating real estate. Up to now, the development of the country has tended to obscure the mistakes and wastefulness of present methods. These are now becoming more apparent, so that it is not hard to visualize a more scientific method of operating our properties.



The south side of Washington's new Triangle, Constitution Avenue from under the shadow of the Washington Monument

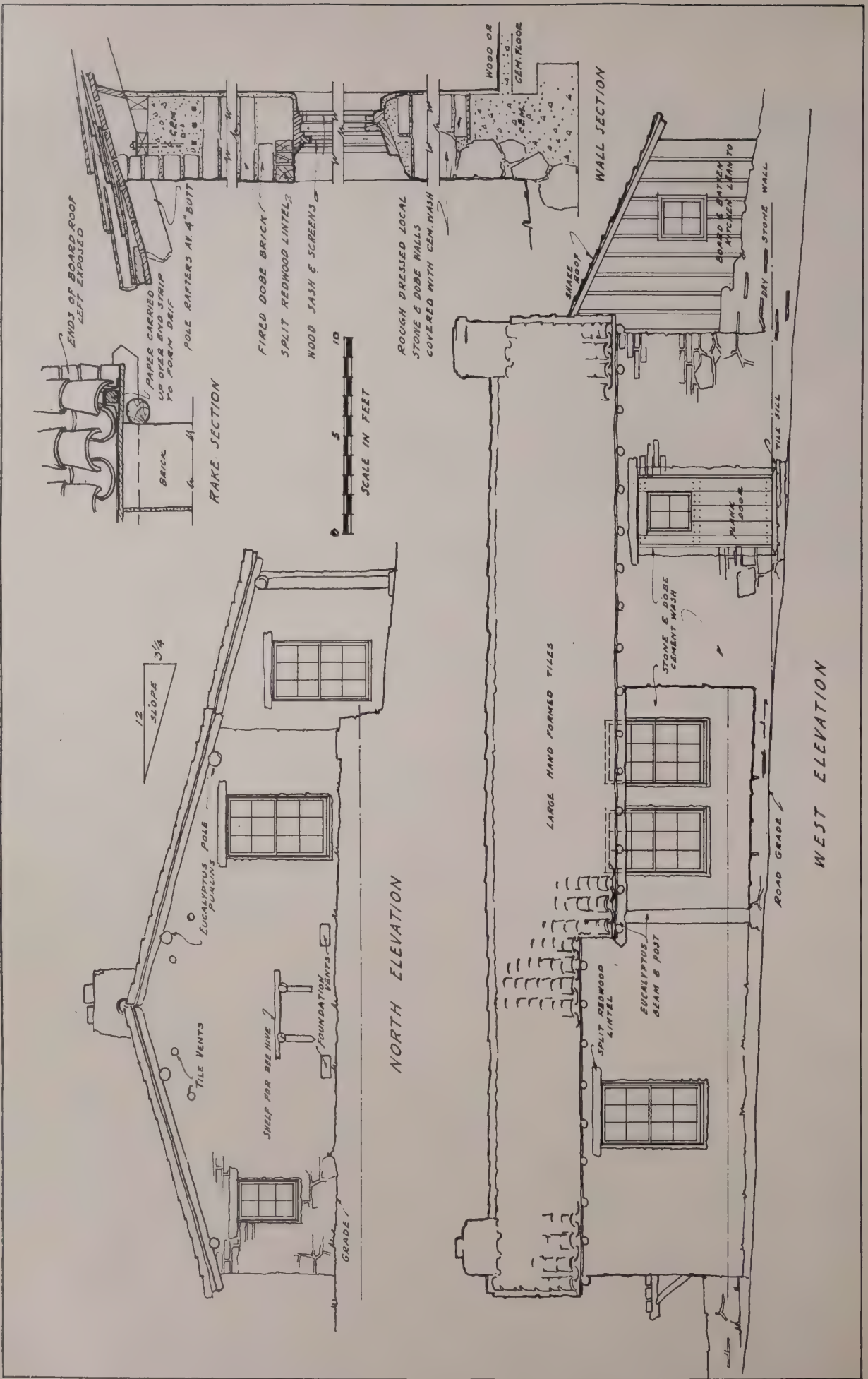
FAVORITE FEATURES



Many of the architect's creations fail to measure up to his expectations. Here is one of a series, however, that satisfy in a measure the designers themselves
(Scale details overleaf)

A California Ranch House
PALMER SABIN, ARCHITECT

« ARCHITECTURE »
JANUARY, 1935



A California Ranch House. Palmer Sabin, architect.



Alexander Piaget

The Medieval Gallery, looking south. The columns and doorway are from Commanderie de Norroi, twelfth century. Walls are of shot-sawn Indiana limestone

St. Louis Art Museum Installations

Mr. Louis La Beaume has been devoting much of his time in the last five years to the work of revamping the installations at the City Art Museum, St. Louis. The photographic illustrations herewith show some of the results



Alexander Piaget

Morlaix Gothic Court — the south-east section. Stone doorways are examples of transitional Gothic Renaissance.

Throughout the Museum some of the backgrounds are authentic entities, others are compositions of authentic fragments, and some backgrounds are merely suggestive

« ARCHITECTURE »
JANUARY, 1935



LeRoy S. Robbins

The Justice's room from Prinknash Park, Gloucestershire (circa 1600)



LeRoy S. Robbins

A room from Hotel Pomponne, Paris (circa 1723). The overpainting is by Charles Antoine Coypel

« ARCHITECTURE »
JANUARY, 1935



LeRoy S. Robbins

*A room from Charlton House
(circa 1723)*



Alexander Piaget

*Morlaix Court. A carved oak
staircase from 14 rue Grande,
Morlaix, France (circa 1510-
20)*

« ARCHITECTURE »

JANUARY, 1935



A room from Georgetown, Va. (circa 1780)

Photographs by Alexander E. Piaget

A room from Charleston, S. C. (circa 1750)





A room from Newburyport, Mass. (circa 1810)

Photographs by Alexander E. Piaget

A room from Salem, Mass., by the architect and wood carver, Samuel McIntire (circa 1800)





Alexander Pinget

*The gallery devoted to the
Italian Renaissance*



*A room from Mrs. Fitzherbert's
Kempshot House. The
wall paper and mantel were
designed by Robert Adam
for George IV*

« ARCHITECTURE »
JANUARY, 1935

1—SHINGLES

SOME one has said that after the foundations of a building the most important thing is the roof. To combine beauty with weather-worthiness and reasonable freedom from repair, is a large order for any architect.

Tongue-and-groove sheathing is generally the base on which wood shingles are applied. Some think that strips are better in that they prevent rotting because of ventilation on the underside of the shingles. However, sheathing does add to the insulating properties of the roof. If the roof is too flat for a satisfactory application of shingles (generally a one-to-two slope is considered the minimum), then no matter by which method they are put on there will be trouble later.

If shingles are dipped in creosote they will undoubtedly last considerably longer than otherwise. Red cedar shingles and those of cypress have established enviable reputations for longevity. It is foolish to spoil good shingles with poor nails. The nails should be zinc-coated or of copper.

Shingles are generally sawed or split. Hand-split shingles will naturally vary somewhat in thickness, which may be desirable in giving a roof texture. This effect is sometimes achieved by doubling shingles at random, or better still, doubling them every so many rows.

Some cities have passed ordinances which prohibit the use of inflammable materials for roofing purposes. To be used instead there are many clay products on the market which give very satisfactory service (Fig. 1A). For example there are shingle-tiles, as they might be called, which are laid in substantially the same way as a wooden shingle, but somewhat more care must be taken in their handling. Their nailing also must be done with care so that they will not be broken or cracked. The nails, of course, should be of non-corroding material, and the tiles should be laid on a saturated felt to give a cushioning effect, as well as to render some assistance in keeping the water out. The end of the tiles should be held in place by non-rusting clips.

Asbestos shingles are deservedly popular, and are laid in the manner described above for those of clay. These shingles are obtained in a sufficient variety of shapes and colors to satisfy almost any taste. Besides this they weather very well.

Better Practice

By W. F. Bartels

ROOFING

A less expensive substitute for the wood shingle, but one which is also fire-retarding, is one of asphalt. This too comes in many colors and weights. There are as a rule three weights, the heaviest being the best. These shingles are preferably laid over a sheet of saturated felt.

2—SLATE AND TILE

In choosing slate for the roof the architect is selecting a material which will last for many years when properly laid. Therefore, after he gets through choosing the various colors and wondering which ones will fade and which will not, and if the sum total will give the blend he desires—he must make one important decision, namely, to employ a good roofer.

There are other details to which the architect must give consideration. Machine-punched holes in tile are generally accepted as being the best and should therefore be called for. There are generally two for the average-size slate, and four for the large ones. The holes are kept at least one and a quarter inches from the edges. The nails holding the slates must be carefully driven, as otherwise they will cause untold harm. If driven in too far they will crack the slate itself. If left protruding they will probably cause the slate on top to be cracked when it is walked on. It is well to specify a cant strip so that the slates may all be laid evenly at start (Fig. 2A). Customary practice projects the slates two inches at the eaves and one inch at the gables. Where slates are laid over concrete, or in places where there is danger that they might become loose, there are special clips on the market for fastening them and insuring that they will stay where placed. The courses next to the ridges of the roof should be laid in elastic cement, and all exposed nail-holes covered with the same material. The ridge itself may be of metal or of slate (Fig. 2B). When of slate it is generally of the saddle or comb type. The former is not unlike the ordinary tile used on parapets, in that each successive one laps the one

in front of it. The comb ridge generally gives a little overhang, which helps the weathering somewhat. If the metal ridge is used it must of necessity be non-rusting, and is better when attached to the ridge piece.

Slate may also be used on flat roofs, and when thus used it is generally laid in tar on a built-up roof.

Tiles are widely employed where a roof is subjected to considerable wear, and where there is not too much limitation on the weight involved, either on the roof or on the owner's pocket-book. The under portion of the roof is what is known as a built-up roof. The tile is selected for quality, color, absence of chipped edges, and the ability to withstand severe weather without chipping. Enough expansion joints must be specified so that there is no danger from expansion or contraction. These joints should run through the cement work on which the tile is laid, and go right down to the felt on which the tar or pitch has been poured (Fig. 2C).

3—METAL ROOFING

Roofing paper under all metal materials adds to the insulating qualities of the roof. But the paper must be free from acids and other substances which are deleterious to the metal placed next to it. Particularly is this true of tin, so that all saturated felt papers must be kept from coming into contact with it. When tin is to be used for the roofing the gauge of the plate, as well as the amount of the coating, should be specified. One should call for the under side of the tin to be protected by a coat of iron oxide mixed with linseed oil. The seams will be ribbed (standing or flat) as the architect sees fit (Fig. 3A).

When copper is used there is something besides the expansion that must be taken into consideration. It should not come into contact with other metal, in order to prevent electrolytic action. Then too, it should be laid over sheathing only, that has been carefully nailed so that projecting nail heads will not puncture or dent it. The flux to be used should be specified as being rosin, or else great care used to see that if acid is used it is "killed," *i. e.*, its strength reduced by the admixture of zinc with it.

Zinc is not as widely used as copper or tin for roofs. It is likely to be very brittle in cold weather and care must be exercised to prevent crack-

ing it; it should not be walked upon.

Galvanized iron is generally stamped by the manufacturer as to its weight, gauge and maker. Should it be desired to protect it further by painting, the galvanizing should first be washed with a solution which any first-class painter's supply house can furnish, otherwise the paint will not stick.

Aluminum is another material that can be used for roofing to advantage, providing there are no gases present that would injure it.

4—COMPOSITION; BUILT-UP ROOFS

The tar-and-gravel roof, or the tar-and-slag roof, is probably the oldest form of what might be termed a built-up roof. These roofs were generally subjected to but little wear. The architect was bothered but little by this type of roofing, beyond seeing to it that there was the proper pitch and percentage of gravel used.

Built-up roofs are being used on many apartment-houses which cannot afford any other kind. High

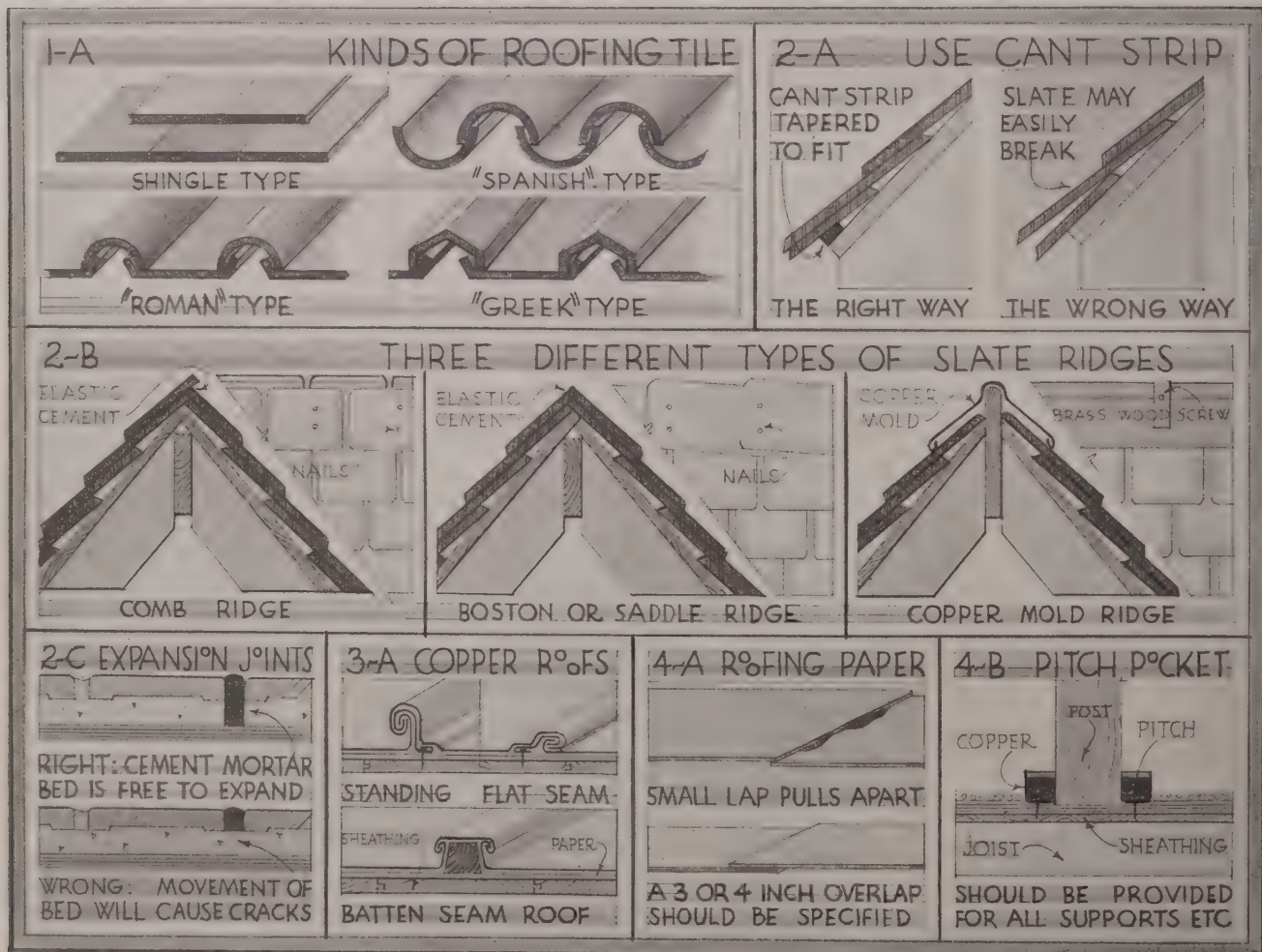
heels play havoc with this type of roof on a hot day. Now that the NRA code prohibits a roofer giving more than a two-year guarantee on any roof, it behooves the architect more than ever to see that the roof is properly described in his specification. First to be considered is the weight and quality of the paper. Seldom is it advisable to use a paper lighter than fifteen pounds to the square. On wooden roofs there should be a layer of building paper laid down first. This is called the "dry sheet," because it prevents the tar from going through to the sheathing. On top of this is nailed a sheet of saturated felt, or one that is impregnated with asphalt or tar. Then on top of this the successive layers are mopped down. The lap must be specified. It generally is such that two layers of the felt cover the nailing of the first layer of the saturated sheets. Then the end lap must be specified. It is generally twelve inches. The top sheet should be one which the architect has selected for wearing qualities, and in all likeli-

hood it will be mineral-surfaced. It must be laid so that upon drying out the sheets will not have been so poorly lapped that the edges will pull apart (Fig. 4A).

Pitch or tar plays an important part in a good roof, and should be given careful consideration by the architect. First, the pitch should not be allowed to be heated to over four hundred degrees. Its melting point should be such that it will stand up under the summer sun without running. And finally, felt should not touch felt, if the best job is to be obtained. By so doing ugly blisters and air pockets will be prevented.

Insulation is an important matter in any roof. With a built-up roof insulation can be had by laying cork or other insulating material over the foundation before the built-up roofing is applied.

One owner with an ingenious turn of mind tried the following experiment on his built-up roof. He painted the entire surface with aluminum paint. He found that the tempera-

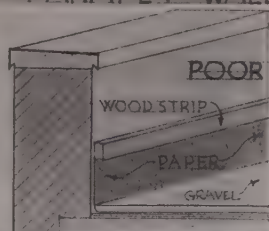


5 ABCD

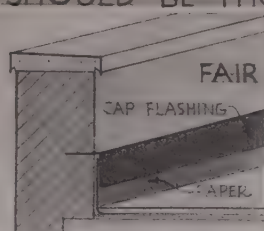
ALL PARAPET WALLS SHOULD BE THOROUGHLY FLASHED



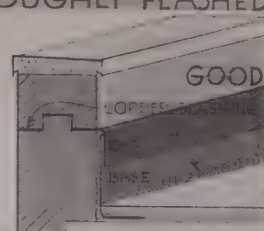
5-A PAPER TURNED UP



5-B SAME HELD BY BOARD



5-C SIMPLE CAP FLASHING



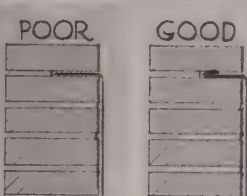
5-D COMPLETE FLASHING JOB

5-E FLASHING BLOCK



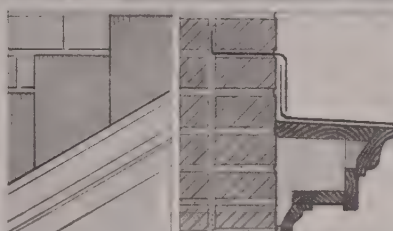
IS OBTAINABLE TO FIT INTO BRICK PARAPETS

5-F TURN THE EDGE



OF FLASHING: IT WILL THEN BE SECURE WHEN CAULKED

5-G PEDIMENT FLASHING



ELEVATION '1' SECTION



ELEVATION '2'

ture in the air space between the roof and the ceiling was eighteen degrees cooler than the similar space in his neighbor's house, which was identically constructed but not painted.

Very often, to save wear on a composition roof, wooden platforms or runways are erected to take concentrated wear such as is caused in hanging up clothes. While this item does not come under roofing, but rather under carpentry or iron work, it is well to insert it while the roofing specification is being written. Should the screws or bolts for any support penetrate the roofing, a pocket should be formed and this space filled with pitch or mastic (Fig. 4B).

Canvas is often used for roofs where it is desirable to deaden noise, and where the traffic is moderate, such as on sleeping-porches. Here canvas is very desirable. After the weight and quality has been decided upon, the chief item to be considered is the manner in which it is laid. The best way undoubtedly is that it be laid in a paste of white lead and linseed oil, and that the edges be nailed down with tacks long enough to penetrate the boards. After the canvas is laid it should be given at least two coats of lead and oil, being sure that each coat is allowed to dry thoroughly before the next is applied.

5—FLASHING

It has well been said that a roof is no better than its flashing, and when

the architect takes a guarantee on a roof he will be wise to have it include the flashing.

Examination of an ordinary speculative-builder type of flat roof shows that the only flashing done is to turn up the roofing material along the wall and stick it in place as well as possible with mastic (Figs. 5A and 5B). A slightly improved type is where a cap flashing is added to the job (Fig. 5C). This generally is of any available metal, giving little or no attention to its durability. These two types should be strictly avoided, but the contractor will often attempt to use them unless the architect is very specific in his demands.

The flashing to be used is, of course, one that will not corrode. The base should be set in the layers of the built-up roofing (Fig. 5D), and if it is over a wood deck then it is well to nail the flashing when it is set. The cap flashing should extend through the wall, if this is possible. The objection one might have to flashing extending through the wall, in that it breaks the bond, is overcome by a flashing which will bond in the wall by a series of keys or dovetails. On the wall side the base flashing should extend up at least eight inches, and the cap flashing should come down over the top of this at least three inches. Where flashing is desired and it is impracticable to use a cap flashing, there are on the market blocks which are built in the walls and have a groove to re-

ceive the flashing (Fig. 5E). Whether this type of block is used, or whether a joint is raked out for the flashing, the edge of the flashing should be turned and not inserted straight. Then when the joint is caulked the lead has something to hold against (Fig. 5F).

Projecting belt courses, and other projecting features such as pediments, should be flashed (Fig. 5G). On jobs such as brick veneer over wood frames, it is essential to have good flashing. Four inches of brick work, as any honest bricklayer will agree, is but poor protection against a continued driving rain. Hence over all windows, doors, and other openings it is desirable to have good flashing, properly applied.

Flashing itself may be of galvanized iron, copper, zinc, or lead. These must be judged by their weight and gauge. Then there is the aristocrat of flashing—the lead-coated copper sheet. This is specified both by the weight of the lead applied per square foot, as well as the weight of the copper sheet itself.

6—GUTTERS, LEADERS, ETC.

Gutters and leaders when of galvanized iron are generally 24 gauge. If it is desired to have them of a different weight it should be so specified. Copper usually comes in several weights, for the same use, and hence should also be called for by weight or gauge. The copper used for gutters and leaders differs from

that used for flashing in that it is "hard" copper as compared to the soft material used for flashing. The soft copper is much more suitable for flashing, because it does not "fatigue" as quickly as the harder metal.

Leaders should always be protected by baskets or strainers. Where the guard is on a flat roof it is better to have it of the bee-hive or dome type than to have it flat or sunken (Fig. 6A). Papers or rubbish gathering against it will not be so likely to cause a stoppage as is the case with the sunken type.

Should it be necessary to discharge a leader upon a roof, a practice that is not at all desirable, the water should be diffused by means of a metal spreader.

Serious consideration should be given to scuppers in any building having a flat roof. Conditions may easily arise where it may well be worth while to have them. They are also desirable in buildings which are sprinkler-protected, to allow for the discharge of the water when the sprinklers operate.

On sloping roofs, crickets or saddles, in such places as back of chimneys, must be provided (Fig. 6B). Heavy snow lodging in such a place can do untold damage if not guarded against. Apropos of snow, it may not be amiss to remember that snow

guards are also important, and should, of course, be of non-rusting metal if they are to survive many winters (Fig. 6C).

Scuttles should be covered with metal, and the edges also, so that there is less tendency to stick if the roof is of tar (Fig. 6D).

7—BULKHEADS AND PARAPETS

Bulkheads are often left unfurred, and plaster is applied directly upon the inner surface of the wall. Bulkheads on the roof are generally in the most exposed places possible. The result is that the weather beats into the walls, and unless properly protected the paint and the plaster soon start to crack and come off. It is essential to see that such places are properly protected, either by furring or dampproofing. Another way is to cover them entirely with the roofing material.

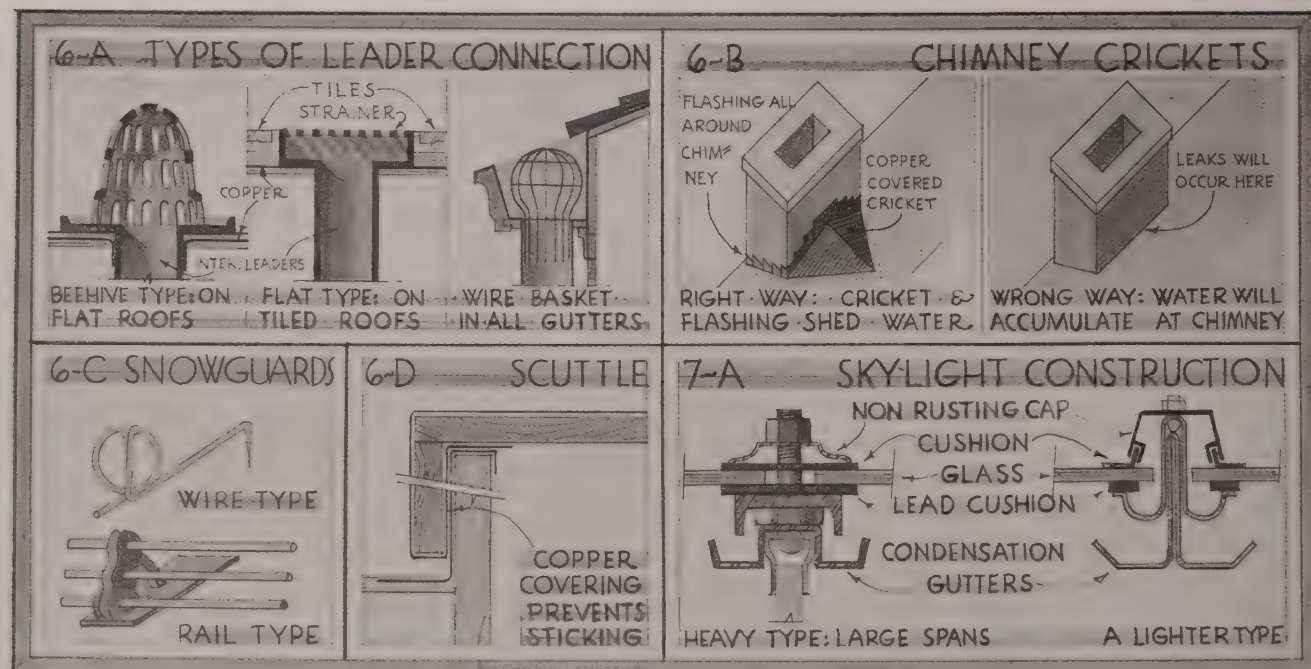
8—SKYLIGHTS

There can be no doubt that the successful skylight consists of two parts. The first is the structural part, providing the support for the second part; the latter taking care of the glass and general weather-tightness of this glass cover. Particular care must be taken in the case of a skylight covering a large span. Ob-

viously there is considerable strain. There must be room for the metal as well as the glass to expand and contract, while the skylight must continue watertight. Skylights are generally made so that any condensation runs down the ledges and thence out through weep-holes. The more simple the construction is, the less chance there is for it to rust because of lack of paint, and the more likely it is to be satisfactory (Fig. 7A). The glass in skylights will vary, from ordinary glass in very small skylights to heavy wire-glass in the larger ones. There is on the market corrugated glass that is not only strengthened because of its corrugations, but the latter also serves the commendable purpose of diffusing light.

The element of protection, also, is one to be given consideration in skylights. Many cities require that all skylights have heavy iron screens over them, and as these screens are fairly expensive it is well for the architect, before finally awarding the roofing contract, to see that these are included.

Many architects call for a practical test of the roof's watertightness before accepting it. This can be done by flooding, if it is a flat roof, or by a sufficient stream of water played upon it if the roof is of the sloping variety.





CUENCA, SPAIN

A SERIES OF DRAWINGS IN SEPIA PEN-AND-INK
AND WASH—BY PHILIP H. GIDDENS

Drawings from Spain

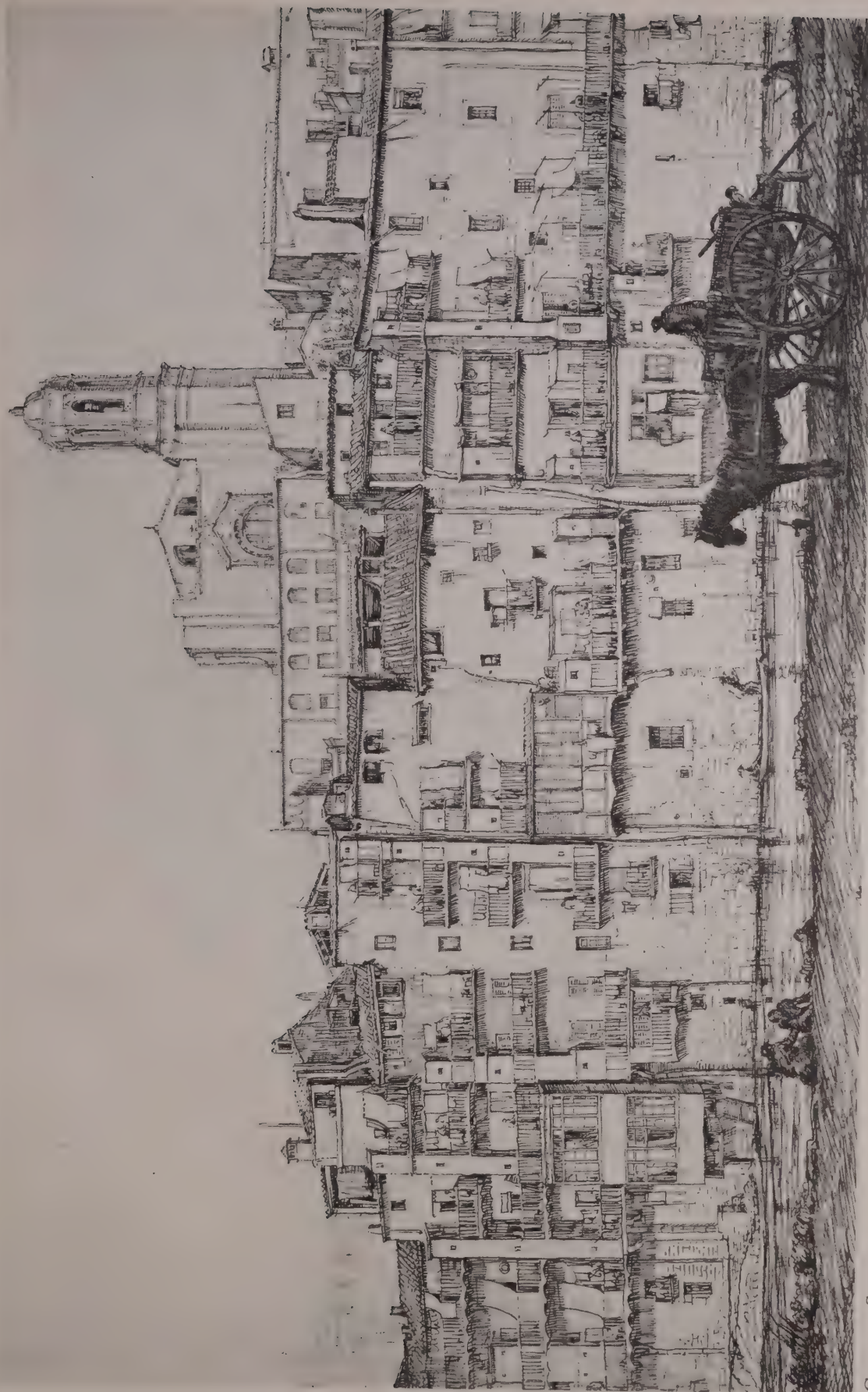
◀ ARCHITECTURE ▶
JANUARY, 1935



GERONA, SPAIN

« ARCHITECTURE »
JANUARY, 1935

From the drawing by Philip H. Giddens



From the drawing by Philip H. Giddens

GERONA, SPAIN

« ARCHITECTURE »
JANUARY, 1935



From the drawing by Philip H. Giddens

GERONA, SPAIN

❖ ARCHITECTURE ❖

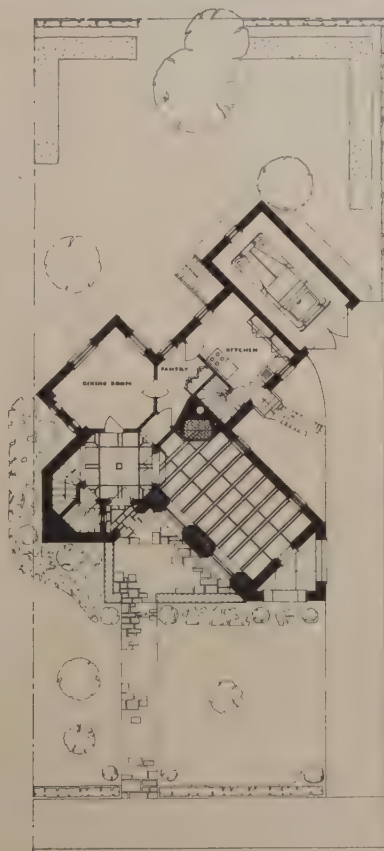
JANUARY, 1935



Exterior walls are of Chestnut Hill stone, supplemented, as will be seen in other photographs, with stucco. In designing the stonework Mr. Sternfeld was influenced by the masonry along the Normandy Coast and in the vicinity of Mont St. Michel



SECOND FLOOR PLAN



FIRST FLOOR PLAN

The plan is unique in that the owner's requirements as to room dimensions were difficult of accomplishment upon a lot only fifty feet wide. The length of the house, taken on a longitudinal axis of the living-room and dining-room out to the porch, is practically fifty feet in itself, yet there is a passageway reserved at the side to enter the garage

House of S. Lloyd Moore Frankford, Pa.

HARRY STERNFELD, ARCHITECT

Photographs by
J. Frank Copeland



South end of the living-room, with entrance at the left from the hall. Interior walls have a sand-finished plaster in natural color. The ceiling here is of cypress boards and mouldings with joists of fir. This ceiling was decorated by Carlo Ciampaglia. Fireplace is of cast stone



The staircase tower as seen from the east. On the miniature balcony under the stair window potted plants are put out to sun



Looking across the entrance hall from the doors to the living-room. Ceiling is of cypress boards and mouldings. Stairs of white oak, radiator grille of wrought iron. Interior woodwork has been painted a dark rich blue, the oak floor also darkly stained



North end of the living-room, with a door to the triangular porch. This room, like every other room on the first floor and every bedroom, has cross draft



The house as seen from the end of the entrance driveway, with the garage doors visible at the right rear. Roof is of black slate

Thursday, November 1.—Dropped in at The Museum of Modern Art to see a vigorous piece of propaganda for better housing. One of the most striking features is a faithful reproduction of a three-room apartment in one of New York's famous dumb-bells. One has but to walk through those three dark, crowded, and dirty rooms to share in the growing realization that this sort of thing is a disgrace to civilization. It would be a great thing if this exhibition could be moved about the country to extend its leavening influence. Incidentally, the Museum has published a booklet, "America Can't Have Housing," edited by Carol Aronovici, and containing short and succinct expressions of opinions from Sir Raymond Unwin, Robert D. Kohn, Lewis Mumford, Catherine Bauer, Edith Elmer Wood, Henry Wright, and others who, both here and in foreign countries, have been putting their shoulders to the wheel of modern housing.

Friday, November 2.—Better Homes in America formally opened its "Little House" on Park Avenue for a press preview today. It seemed something like an Architectural League Show opening, in that one was continually falling over carpenters and painters in the last throes of finishing the job. The furnishings, all bought within a budget of two thousand dollars, are skillfully chosen and disposed. Mrs. Annette Hoyt Flanders has designed a very lovely garden in the restricted plot. One is somewhat startled to find fairly well-grown espaliers against the house, but the theory is that the garden costs one hundred dollars per year for five years, after which two more years are supposed to have matured it. The effect now, therefore, as it opens, is that of a seven-years' development. In my search after all the latest developments of building ingenuity I was eager to find what kind of screens had been used, only to be told by Mr. Wendehack that they had not thought about these as yet.

Saturday, November 3.—The number of subjects and the variety of these that come to an editor's desk is at times staggering. For instance, we are asked this morning to get behind ex-Governor Walter J. Kohler, of Wisconsin, in making the State more cheese conscious.

Monday, November 5.—In the speech recently made by Colonel Horatio B. Hackett, Director of the Housing Division, PWA., before the American Institute of Steel Construction in Chicago, there are one or two official revelations of our failure to get any low-cost housing or slum clearance done. Out of some five hundred thirty-three applications, only eighteen ever received tentative allotments. Out of the eighteen, only seven eventually survived, re-



The Editor's Diary

ceived their loans and began to build. Then came the change of front with the government itself doing the building. Thirty-nine projects have been budgeted, on some of which demolition is under way, upon others the process of acquiring land is slowly proceeding, while on others the preliminary investigations are still under way.

Wednesday, November 7.—The expressions of opinion drawn from various sources by our Guest Editor in the October issue are producing a few reverberations. This matter of architectural education, for instance: Are the schools dumping upon the country a yearly flood of new architects who have now, and may have for some time, little or nothing to do? Goldwin Goldsmith, who is chairman of the Department of Architecture at the University of Texas, points out the fact that this picture is not quite so bad as that. He says:

"While architectural schools may have from fifty to several hundred students each year, I imagine they do not graduate very many. We, for example, graduate quite a bit less than 10 per cent of the students, and we are cutting down this proportion by stiffening the work. We do not expect many of these students to become practicing architects but feel that they are well equipped by their education to enter other fields. If this were not so we might feel that the schools were flooding the country with architects who, even under former conditions, would be unable to make a living in the profession. I am seriously concerned over the present situation; and if it were not for the quite satisfactory general education which the students get in a five-year course, I should almost feel that it was time many of the schools were laid away in camphor for a decade and possibly permanently."

Thursday, November 8.—Continuing the series of luncheons at the League, in which the plight of the building industry is discussed, we had today Lawrence Cummings, vice-president of the Real Estate Board of New York. We have heard a lot about the attitude of the real-estate men toward housing and the injection of government capital into building, and here was a true representa-

tive of that interest. R. H. Shreve and Kenneth Murchison told us what a good fellow he is, so we'll take their word for it, but the gentleman's ideas had to come unsponsored and they were not so good. He believes, for instance, that since we have too many building vacancies now, it is absurd to build any more space—a perfectly rational idea except as applied to low-cost housing. The real-estate interests never have met the needs of the low-income group, and probably never will. Why they should object, therefore, to these needs being met in a measure as a public duty is not clear. The only sort of housing with which the new low-cost housing competes is a form of shelter that has always been, by law, unfit for human habitation.

Saturday, November 10.—The officials of the New York Chapter, A. I. A., are becoming very much excited over what they consider to be the Treasury Department's threat to eliminate the private architectural office. I must confess that I have not been able to share their excitement and fervor in the counter attack. Most of the dissatisfaction with the present arrangement for designing public works seems to come from the large offices which, of course, can have no part in this program. The smaller man, however, has an increasingly important part, and seems to like it. Possibly it is his turn to render this public service and be paid for it. I am inclined to think that it is no more than a temporary opportunity for getting some post-offices designed efficiently and promptly. Incidentally, the supply of post-offices must be approaching rather closely the need for such buildings. We can't go on building new ones for ever. The government's housing program, which seems likely to be the larger part of the public-works drive, is to be handled in the respective localities.

Tuesday, November 13.—Speaking of architectural education, as we have been recently, S. W. Mosher, examiner for the Municipal Civil Service Commission, City of New York, tells me that a rather surprising fact was manifested in a recent examination. An architectural renderer was being sought, and there were fifty-three candidates for the job, of which number only seven passed. The disturbing fact, however, is that five of these seven were educated either entirely or in part abroad. The candidate with the highest rating was born in Budapest, and educated there and in the Royal University of Hungary. The second highest rating was given a man born in St. Petersburg, educated in the St. Petersburg High School and the Institute of Civil Engineering in the same city. The third highest rating was that of a man who was born in Scotland, educated at the University of St. Andrews and the Glasgow School of Architecture. Fourth was a man who obtained his ele-

mentary and technical training in Austria and who later obtained his master's degree from the Massachusetts Institute of Technology.

Wednesday, November 14.—At a meeting of the Chapter today, the certificates of fellowships as announced at the last convention of the A. I. A. were distributed to the New York Chapter's new Fellows. Mrs. Raymond M. Hood was the guest of honor, to receive the certificate of her late husband. Other recipients were Walter D. Blair, Thomas H. Ellett, Leon N. Gillette, Ely Jacques Kahn, William F. Lamb, James Gamble Rogers, Clarence S. Stein, and Henry Wright.

The president, Ralph Walker, read a number of replies received in answer to a questionnaire recently sent out by the officers, asking where the profession is going and why. These answers blamed practically every known enemy of mankind and civilization as the cause of our troubles, save only the sabre-tooth tiger, which for some reason was overlooked. It would seem that the only way in which such a mass of troubles could be discussed intelligently would be to appoint hard-working small committees for the various subdivisions—publicity, public-works relations, fees, local civic activity, and the like, and then devote one general meeting to the discussion of each of these committee reports. An open meeting can reach a conclusion on one item discussed, but certainly not on the general subject of what is wrong with the world.

Friday, November 16.—There was talk a year or so ago of converting the site of the Century of Progress into an airport after the fair had closed. And now the Mayor of New York proposes to enlarge Governors Island, and convert it into a municipal airline terminal, reached from Manhattan by a subway. Airports having been crowded out of our city plans by their late arrival, are edging in where they belong.

Wednesday, November 21.—Clarence E. Farrier, who had much to do with the success of the Century of Progress Exposition, having had charge of planning, designing, construction, and operation, is off to a new job at Knoxville, Tenn., where he will be co-ordinator of the Development Organizations, Tennessee Valley Authority.

Thursday, November 22.—The editors of journals of various branches of industry have gathered here in Washington to interview those who are responsible for policies, in order to find out as much as we can of the background of today's industrial development. Beginning with a breakfast session at which George D. Buckley, assistant administrator of the Federal Housing Administration, spoke, we had the opportunity of hearing James

A. Moffett, administrator, FHA; a message from the Secretary of Commerce, Daniel C. Roper, through one of his deputies; Sidney Hillman, authority on labor; Eugene Meyer, former governor of the Federal Reserve Bank; Willard M. Kiplinger, one of the keenest and most impartial observers stationed in Washington; and A. D. Whiteside of the NRA.

This evening while the other editors listened to British, Belgian, German, and Russian representatives on the subject of international recovery, I fell in with a congenial group of the architects who have been called to Washington to design public works. They met at a weekly dinner—the Dutch Treat Club—where, under the general toastmastership of Wesley Bessell, we talked of architecture, government, the mysteries of red tape, the joys of having something to do, and many other things. There were many familiar names and faces there: Victor Abel, LeRoy Barton, David Cushman Coyle, Max Dunning, Alfred Fellheimer, William Dewey Foster, Eric Kebbon, Horace Peaslee, Kenneth Reid, Lorimer Rich, and Louis Rosenberg—perhaps thirty men, most of them architects from New England, the South, and as far west as California.



Friday, November 23.—I skipped what seemed to be some very promising programs set out for the editors' benefit today to prow through the Supervising Architect's offices and those of the Federal Housing Administration, to learn more of what is going on therein, coming back for luncheon so as not to miss hearing the Secretary of Agriculture, Henry Wallace, tell very simply and convincingly the steps being taken to lift, as far as possible, the economic burden caused through our becoming a creditor nation instead of a debtor, and being no longer able to sell abroad the products of our expanded agricultural plant.

The Supervising Architect's office dwells in two places now; the permanent organization in the Government Warehouse down in the southwest part of the city, and the temporary organization consisting of architects brought to Washington to design a certain building or group of buildings, in one of the old war buildings, known as Building F, in the same section of the city. The latter establishment has many of the characteristics of the ateliers of our student days. Here are enthusiastic little groups of men working under an architect from Georgia, Illinois, or California, designing and producing the working drawings for a new post-office or court-house. The design is being produced in an atmosphere of keen and good-humored rivalry, where one group has no hesitation in telling another group what it thinks of its

design and why. The work is being turned out with amazing rapidity and efficiency, due to several contributing factors. One is that the technical knowledge required is available on the spot. A second is that the criticism or approval of the client is had within an hour, through a liaison officer, and third, because the work is carried through with considerable pressure as to the time element in order to make these public works effective as an aid to national recovery. This new method, by which designing architects are brought to Washington for a few months is in strong contrast with the former procedure of allotting specific buildings to local architects in their own communities. With the best intentions in the world, it seems impossible with the long-distance method to turn out a set of working drawings in, say, six months. The men who have come to Washington to speed the public works program can turn out a similar set in a month.

There has been, of course, much criticism on the part of the architectural profession and its leaders, of the procedure by which a number of architects have been brought to Washington to do a specific job of design. Whatever may be the opinion of those who are not in active touch with the working out of this plan, the men who are down there are enthusiastic about it, and an unprejudiced observer cannot fail to be impressed by the results. Unquestionably it is a temporary expedient, without which the program of public works would have been, and would continue to be, stalled. No one, I think—least of all the Treasury Department—desires or expects the establishment of a permanent bureaucracy to produce government architecture.

Diametrically opposite in method is that followed by the Federal Housing Administration under Colonel Hackett. He is building up in his department, under Alfred Fellheimer of Fellheimer & Wagner, New York, who spends three weeks out of every month down there, a source of housing standards. The housing projects, thus far mostly limited-dividend corporation efforts, are perhaps necessarily designed in the localities in which they are to be built. The Housing Administration, however, attempts to supply these far-flung designers with the best technical knowledge available to date. The independent designer may quite possibly improve upon these standards, which are in the shape of unit plans for various needs, but he will not be allowed to fall below them in government-financed work. In the working out of this scheme the local architect comes to Washington, works out his plot plan with the aid of the Housing Division technicians, secures a tentative approval, and goes back home to make his working drawings. The plan has not yet been in practice long enough to prove whether or not it is the most workable that can be devised.



Looking across the entrance court from the south. Walls of the lower story are of common brick painted flat white; the second story, of vertical boarding with moulded battens, also painted flat white

House of Louis C. Rosenberg Fairfield, Conn.

LOUIS CONRAD ROSENBERG, ARCHITECT

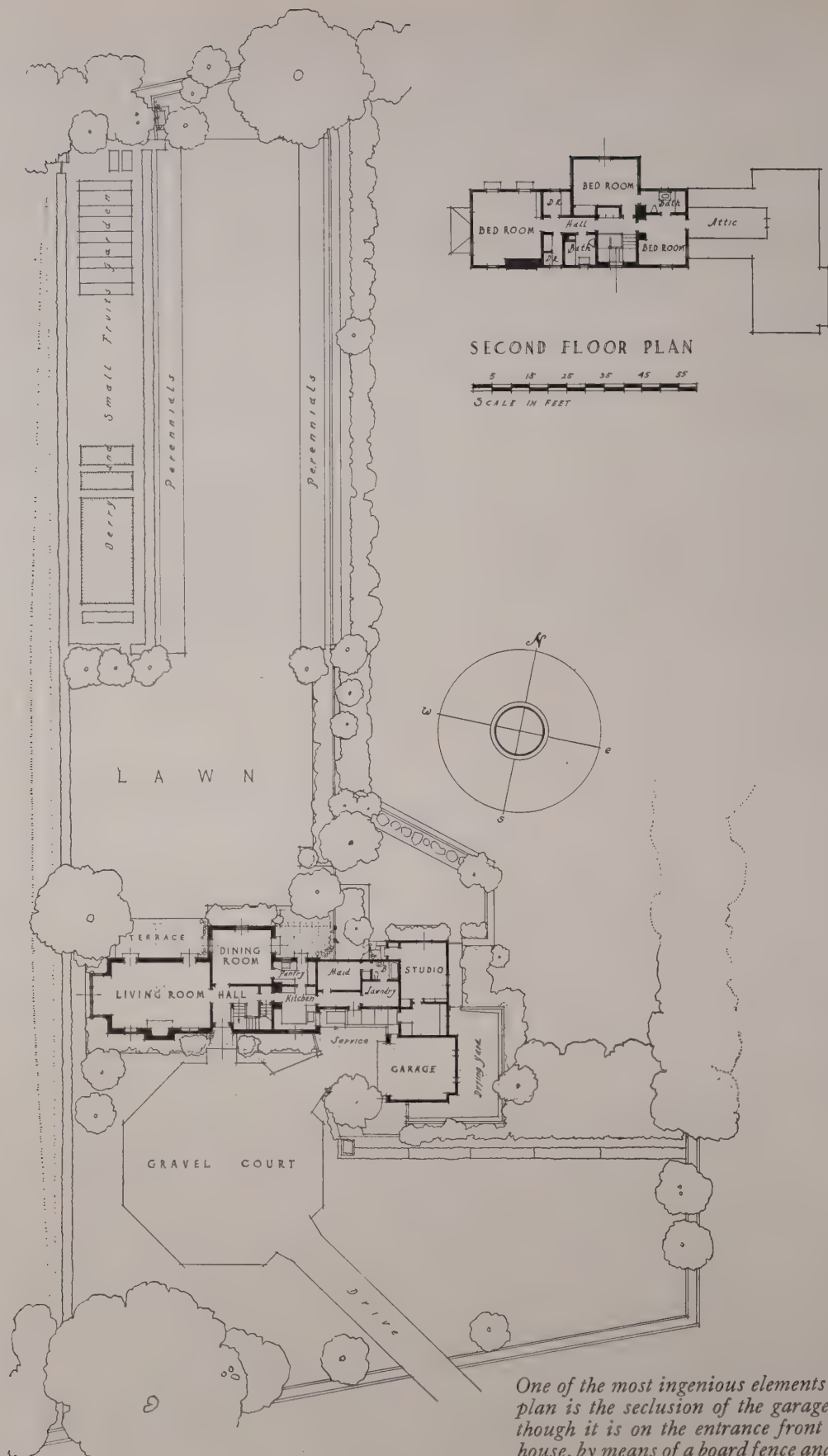
Photographs by H. H. S.



From the lawn at the north of the house, looking down the long grass panel toward the shaded terrace in the dis-

tance. Mr. Rosenberg is starting a promising piece of topiary work in the traditional box-wood as seen in the left foreground

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One of the most ingenious elements of the plan is the seclusion of the garage, even though it is on the entrance front of the house, by means of a board fence and gates



The garden front as seen from the long panel of lawn between its perennial borders. The roof is of shingles stained dark green

The front entrance, deeply recessed in the brick walls



A composition of battened gables





The house as seen from the hay field to the west. Mr. Rosenberg is expecting much from the two plane trees through which one sees the entrance doorway



Looking across the front of the house toward the secluded garage, with an amusing weather vane showing the artist at his easel

Looking north along the east perennial border, backed by its typical Connecticut stone wall





In the living-room, walls and ceiling are painted a flat white, the floor a dark oak. The furniture consists of antiques in walnut and mahogany

In the hall the sheathed wood walls are also painted flat white. The needed touch of color is given by window draperies

The bay-window end of the living-room. Here again color counts strongly against the white walls in the heavy curtains of deep blue, with sash curtains in heavy linen of a light bottle green





*The terrace on the north side of the living-room. The balconies above open from the master's bedroom
The dining-terrace to the east of the dining-room, and also facing the garden*



THE NINETY-NINTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS
ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF CIRCULAR WINDOWS, GOTHIC AND ROMANESQUE

*Subjects of previous portfolios are listed below
at left and right of page*

❖ 1926
DORMER WINDOWS
SHUTTERS AND BLINDS

❖ 1927
ENGLISH PANELLING
GEORGIAN STAIRWAYS
STONE MASONRY TEXTURES
ENGLISH CHIMNEYS
FANLIGHTS AND OVERDOORS
TEXTURES OF BRICKWORK
IRON RAILINGS
DOOR HARDWARE
PALLADIAN MOTIVES
GABLE ENDS
COLONIAL TOP-RAILINGS
CIRCULAR AND OVAL WINDOWS

❖ 1928
BUILT-IN BOOKCASES
CHIMNEY TOPS
DOOR HOODS
BAY WINDOWS
CUPOLAS
GARDEN GATES
STAIR ENDS
BALCONIES
GARDEN WALLS
ARCADES
PLASTER CEILINGS
CORNICES OF WOOD

❖ 1929
DOORWAY LIGHTING
ENGLISH FIREPLACES
GATE-POST TOPS
GARDEN STEPS
RAIN LEADER HEADS
GARDEN POOLS
QUOINS
INTERIOR PAVING
BELT COURSES
KEYSTONES
AIDS TO FENESTRATION
BALUSTRADES

❖ 1930
SPANDRELS
CHANCEL FURNITURE
BUSINESS BUILDING ENTRANCES
GARDEN SHELTERS
ELEVATOR DOORS
ENTRANCE PORCHES
PATIOS
TREILLAGE
FLAGPOLE HOLDERS



*Below are the subjects of
forthcoming Portfolios*

Tile Roofs
FEBRUARY

Molded Brick
MARCH

Dormer Windows
APRIL

Entrance Seats
MAY

Overdoors, Interior
JUNE

Brick Cornices
JULY

*Photographs showing interesting
examples under any of these head-
ings will be welcomed by the Edi-
tor, though it should be noted that
these respective issues are made up
about six weeks in advance of
publication date.*

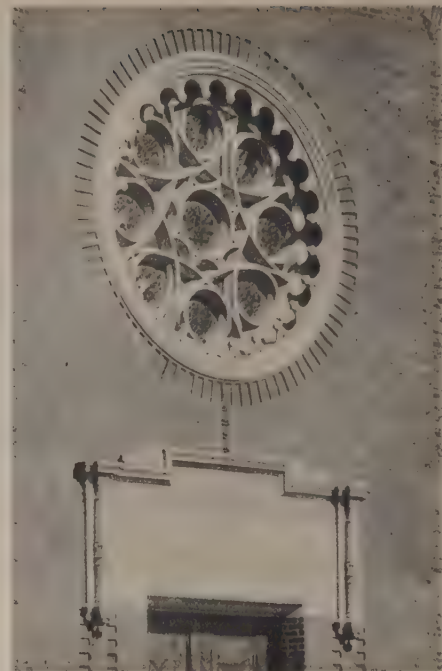
❖ 1930
CASEMENT WINDOWS
FENCES OF WOOD
GOTHIC DOORWAYS

❖ 1931
BANKING-ROOM CHECK DESKS
SECOND-STORY PORCHES
TOWER CLOCKS
ALTARS
GARAGE DOORS
MAIL-CHUTE BOXES
WEATHER-VANES
BANK ENTRANCES
URNS
WINDOW GRILLES
CHINA CUPBOARDS
PARAPETS

❖ 1932
RADIATOR ENCLOSURES
INTERIOR CLOCKS
OUTSIDE STAIRWAYS
LEADED GLASS MEDALLIONS
EXTERIOR DOORS OF WOOD
METAL FENCES
HANGING SIGNS
WOOD CEILINGS
MARQUISES
WALL SHEATHING
FRENCH STONEWORK
OVER-MANTEL TREATMENTS

❖ 1933
BANK SCREENS
INTERIOR DOORS
METAL STAIR RAILINGS
VERANDAS
THE EAGLE IN SCULPTURE
EAVES RETURNS ON MASONRY
GABLES
EXTERIOR LETTERING
ENTRANCE DRIVEWAYS
CORBELS
PEW ENDS
GOTHIC NICHES
CURTAIN TREATMENT AT
WINDOWS

❖ 1934
EXTERIOR PLASTERWORK
CHURCH DOORS
FOUNTAINS
MODERN ORNAMENT
RUSTICATION
ORGAN CASES
GARDEN FURNITURE
WINDOW HEADS, EXTERIOR
SPIRES
BUSINESS BUILDING LOBBIES
ROOF TRUSSES
MODERN LIGHTING FIXTURES



*Monastery of the Poor Clares,
Bronx, N. Y.
Robert J. Reiley*

*Washington Cathedral, north transept
interior
Frohman, Robb & Little*



Exterior of the above

*Church of the Heavenly Rest,
New York City
Mayers, Murray & Phillip*





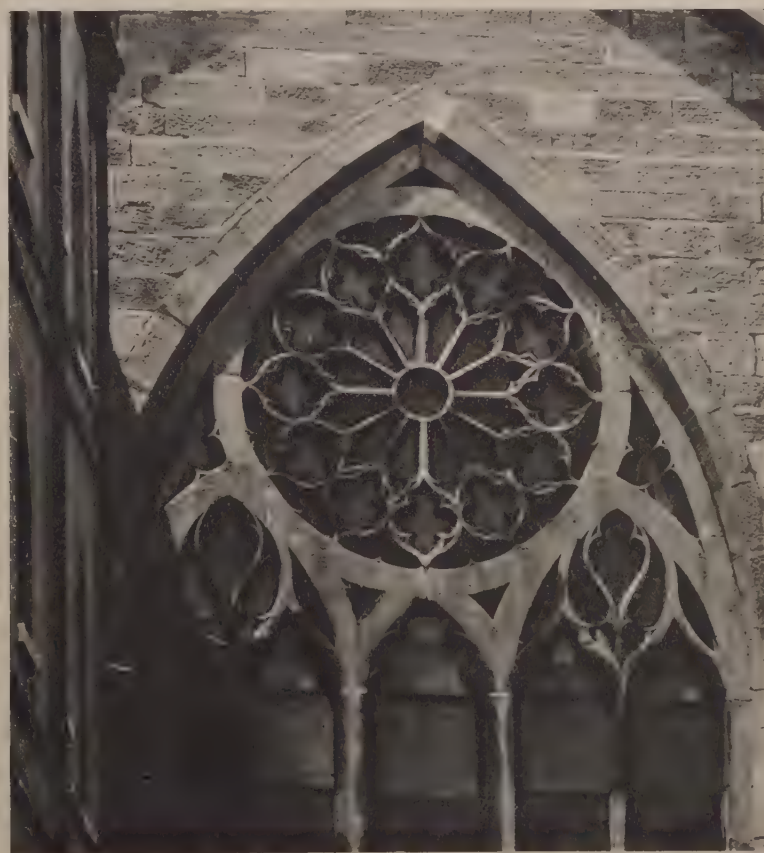
*St. Michael's Church, Litchfield, Conn.
Rossiter & Müller*

*Interior, Grace Church, New York City
Heins & LaFarge*



Exterior of the above

*First Baptist Church, Cleveland, Ohio
Walker & Weeks*





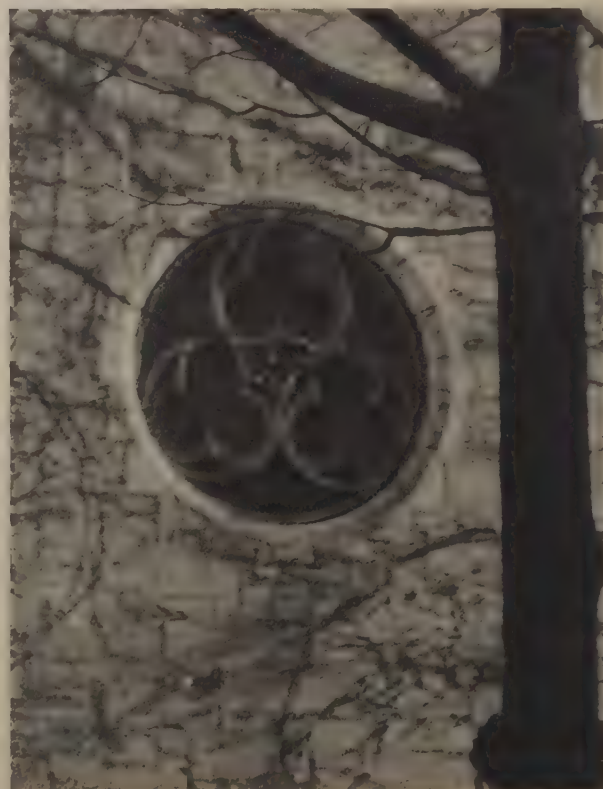
Unity Church, North Easton, Mass.
Charles J. Connick; John Ames Mitchell

St. Thomas's Church, New York City
(destroyed by fire)
Richard Upjohn



First Presbyterian Church, New York City
Grosvenor Atterbury

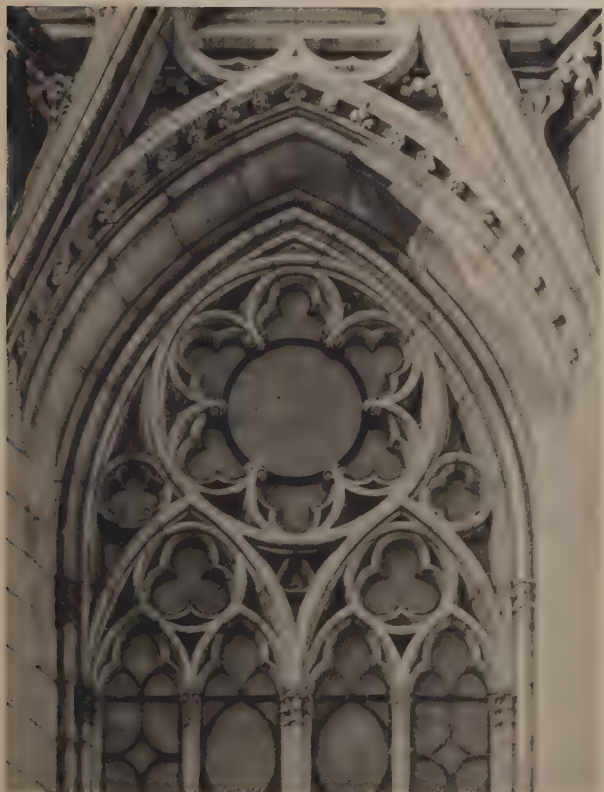
Christ Church, Raleigh, N. C.
Hobart Upjohn





*Queen of All Saints Building, Brooklyn, N. Y.
Reiley & Steinback*

*Lady Chapel, St. Patrick's Cathedral,
New York City
Charles T. Mathews*



*Grace Cathedral, San Francisco, Calif.
Charles J. Connick; Lewis P. Hobart;
Cram & Ferguson*

*Liverpool Cathedral
Sir Giles Gilbert Scott*





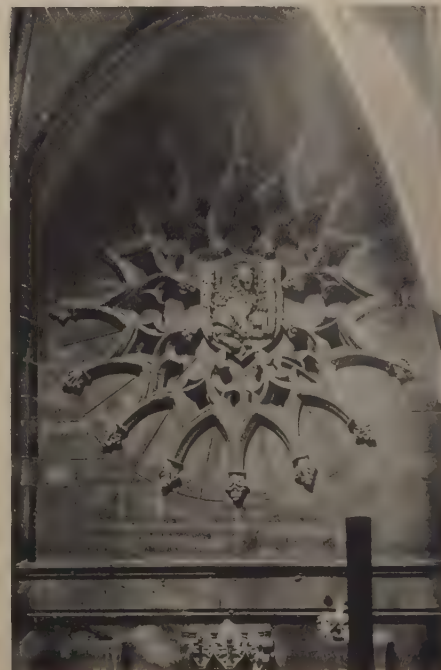
*Washington Cathedral,
Washington, D. C.
Frohman, Robb & Little*

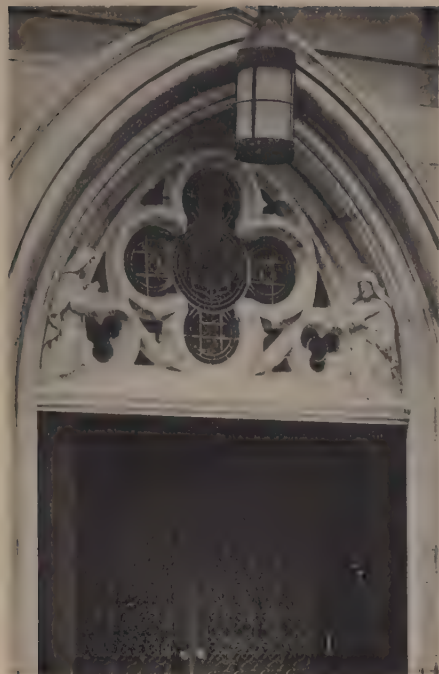
*St. Thomas's Church, New York City
Cram, Goodhue & Ferguson*



Interior of the above

*Baptistry, Cathedral of St. John
the Divine, New York City
Cram & Ferguson*





*Howell Funeral Church, New York City
Harry C. Ingalls*



*St. Patrick's Cathedral, New York City
James Renwick*

*Epworth Euclid M. E. Church,
Cleveland, Ohio
B. G. Goodhue Associates;
Walker & Weeks*

*Another window in the Baptistry,
Cathedral of St. John the Divine*





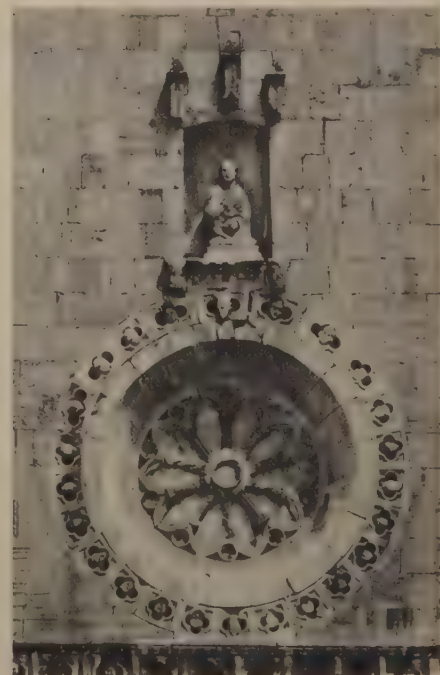
*Church of Sta. Maria della Pieve
(thirteenth century), Arezzo*

*Church of S. Agostino (fourteenth
century), Palermo*



*The Riverside Church, New York City
Henry C. Pelton; Allen & Collens*

*The Cathedral (fourteenth century),
Orbetello*





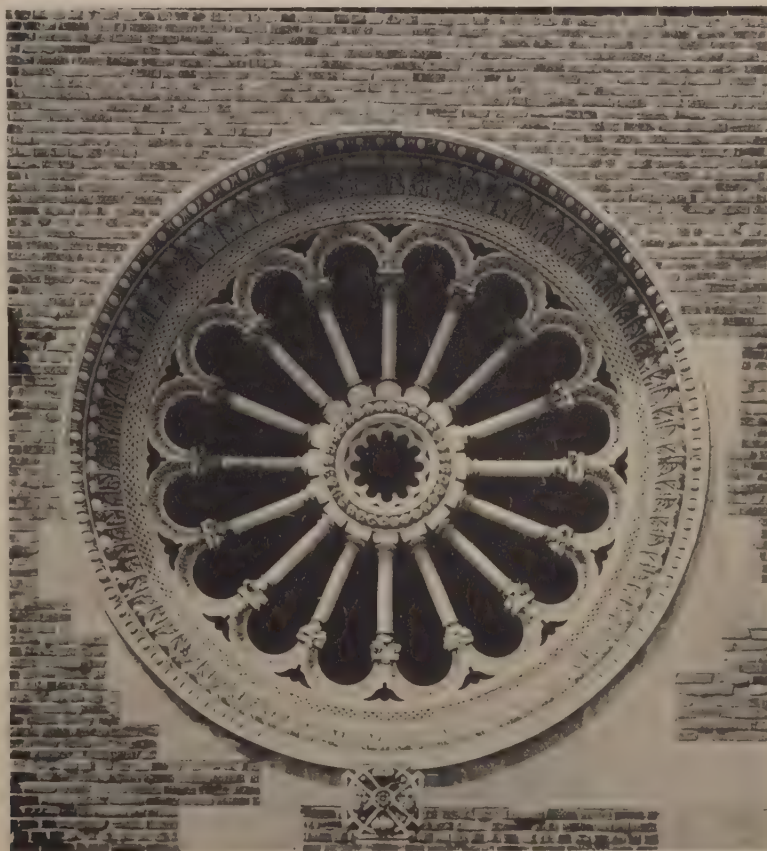
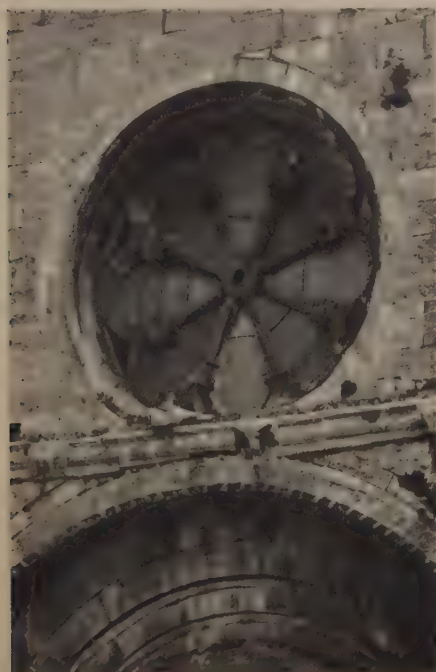
Church of San Francesco (twelfth century), Corneto Tarquinia



The Duomo (fifteenth century), Todi

*Church of the Guardian Angels,
New York City
John V. Van Pelt*

San Quirico in Val D'Orcia





*Italian Baptist Church, Newark, N. J.
Electus D. Litchfield; Pliny Rogers*

*Church and School of Our Lady of Victory,
New York City
John V. Van Pelt*



*The Riverside Church, New York City
Henry C. Pelton; Allen & Collens*



*First Baptist Church, Cleveland, Ohio
Walker & Weeks*



*St. Mary's of the Immaculate Conception,
Jamaica, N. Y. Gustave E. Steinback*

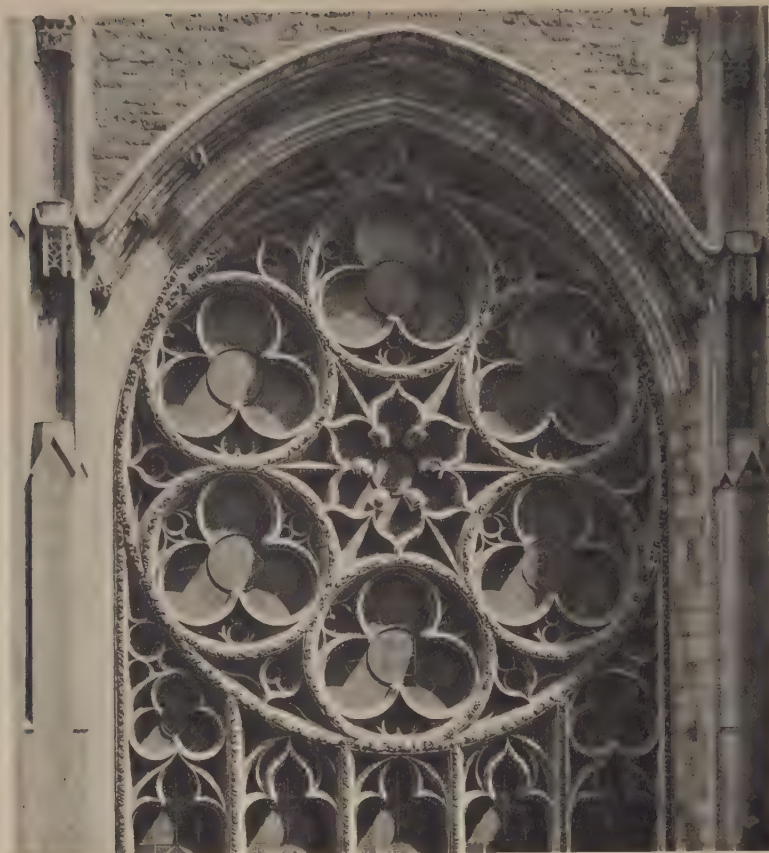


*St. Mary's R. C. Church, Jersey City, N. J.
Robert J. Reiley*

*Wilshire Boulevard Congregational Church,
Los Angeles, Calif. Allison & Allison*



*Kent School Chapel, Kent, Conn.
Roger H. Bullard; Arthur Loomis Harmon*



*Church of the Blessed Sacrament,
New York City
Gustave E. Steinback*

*Church of St. Vincent Ferrer,
New York City
Bertram G. Goodhue*



*Church of the Heavenly Rest,
New York City
Mayers, Murray & Phillip*

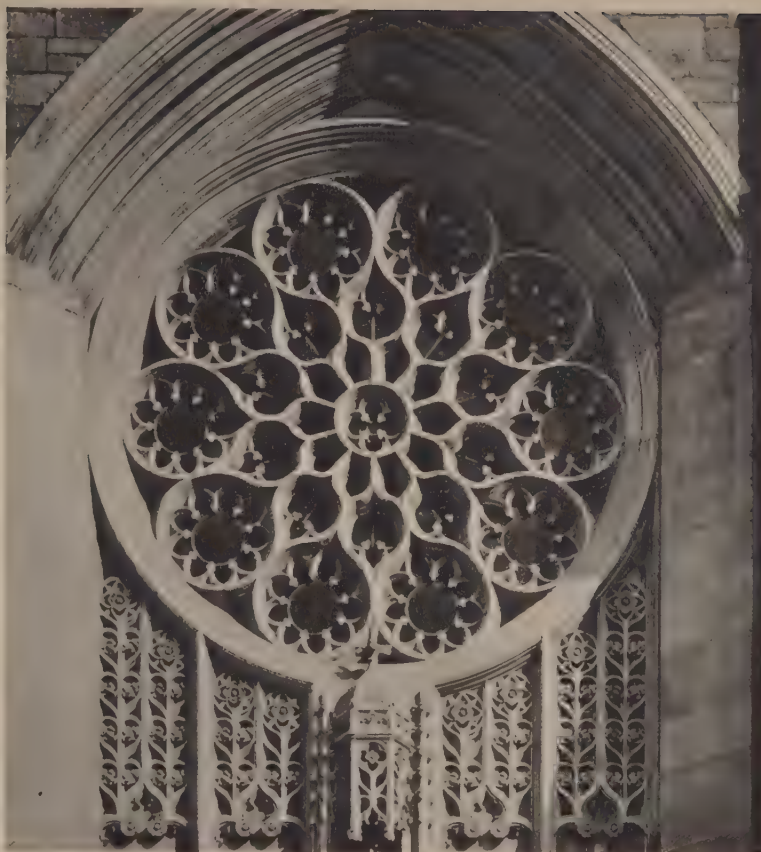
*St. Paul's Cathedral, Detroit, Mich.
Cram & Ferguson*





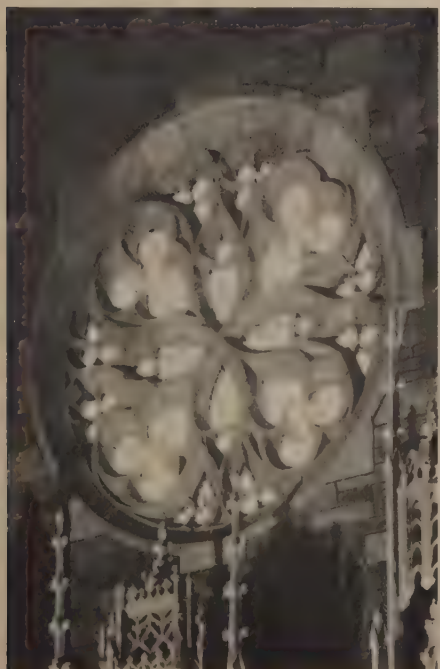
*St. James's P. E. Church,
New York City
Robertson & Potter*

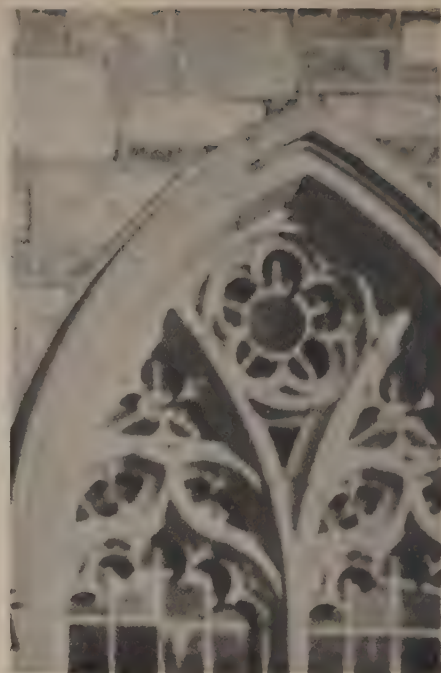
*Church of St. Peter and St. Paul,
Bronx, N. Y.
Robert J. Reiley*



*Grace Church, New York City
James Renwick*

*Holy Cross Church, Germantown, Pa.
Henry D. Dagitt & Sons*





*St. Michael's Church, Litchfield, Conn.
Rossiter & Müller*

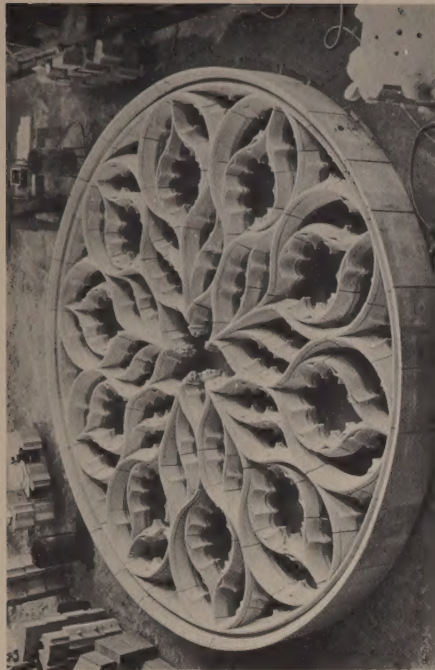
*Chapel at Mercersburg Academy,
Mercersburg, Pa.
Charles J. Connick; Cram & Ferguson*



*Cathedral of St. John the Divine,
New York City
Charles J. Connick; Cram & Ferguson*

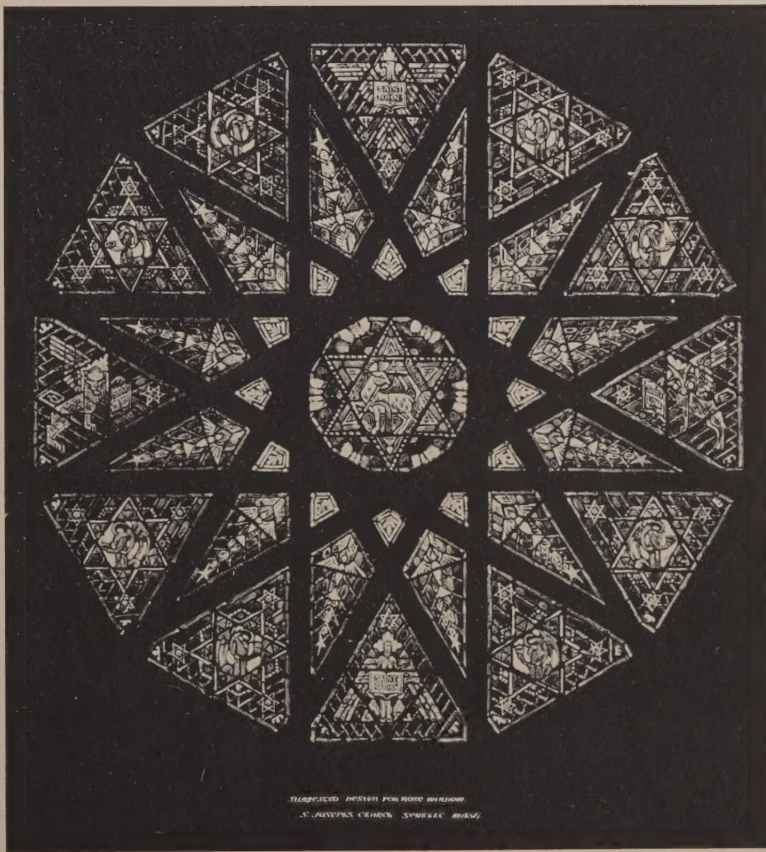
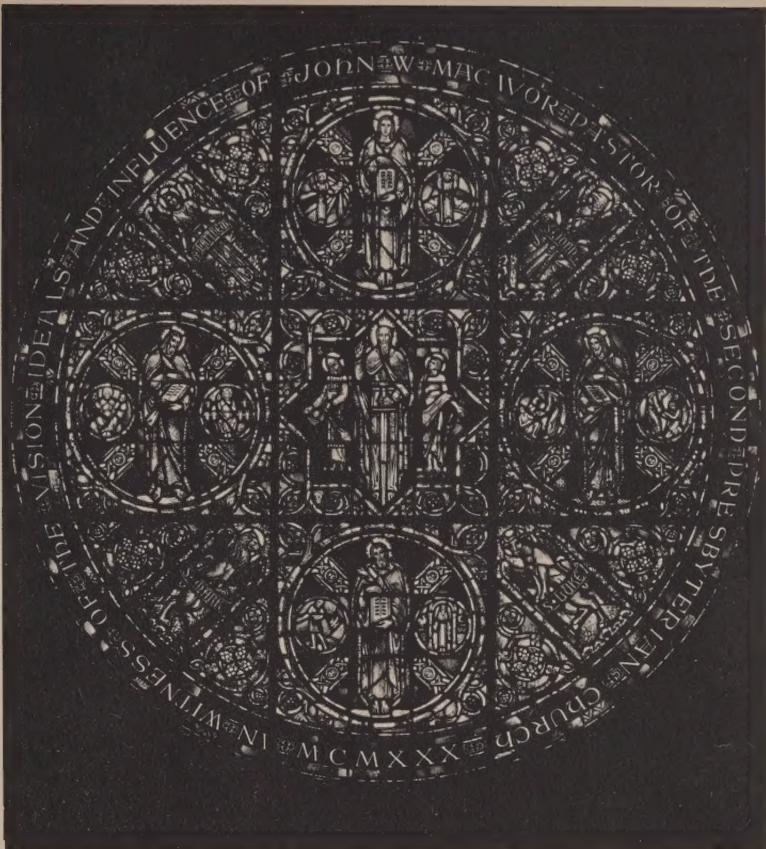
*Park Avenue Baptist Church,
New York City
Henry C. Pelton; Allen & Collens*





*Holy Rosary Church, Pittsburgh, Pa.
Cram & Ferguson*
*Second Presbyterian Church,
St. Louis, Mo.
Charles J. Connick;
La Beaume & Klein*
*St. Joseph's Church, Seattle, Wash.
Charles J. Connick; A. H. Albertson;
Joseph W. Wilson & Paul Richardson*

Interior of the above





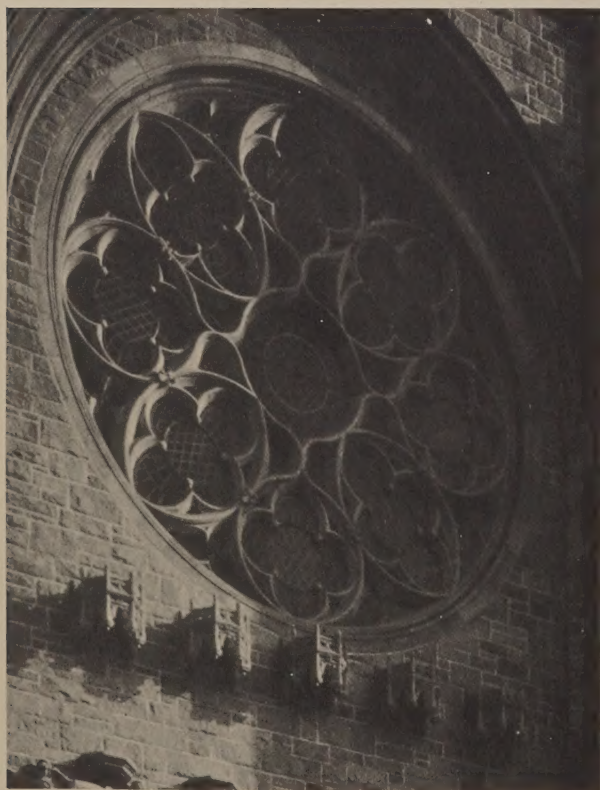
*Chicago University Chapel, Chicago, Ill.
Bertram G. Goodhue; B. G. Goodhue Associates*



The Cathedral, Milan

*Sacred Heart Church, Jersey City, N. J.
Cram & Ferguson*

*Church of Notre Dame (thirteenth century),
Grand-Andeley, Normandy*





MANHATTAN FORUM
From the drypoint (10¼ by 7¼ in.) by
CHESTER B. PRICE

Chester B. Price
By courtesy of Harlow, McDonald & Co., New York

« ARCHITECTURE »
FEBRUARY, 1935